

**SUPERMICRO®**

# New Generation A+ Servers

Opteron™ 6000/4000/3000 Family Based Platforms



## Server Building Block Solutions®

Twin Family · GPU Solutions · SuperBlade® · 4-Way · MicroCloud

InfiniBand · 95%+ Power-Efficiency · BBP™

Opteron™ 6300 CPU Ready

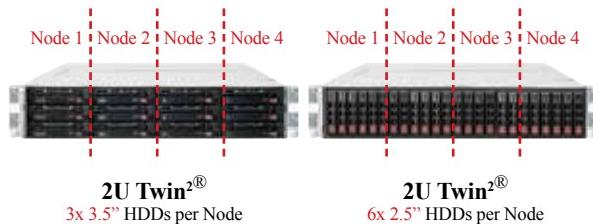


November 2012

## Optimized Twin Architecture with AMD Opteron™ Performance



- Highest Performance per Watt
- Highest Performance per Dollar
- Four Independent Hot-pluggable DP nodes
- Redundant Platinum Level Power Supply
- Power-Efficient Serverboard & Cooling Subsystem Designs
- 6Gb/s SAS (SAS 2.0) Optional



## Resource Optimized High-End Enterprise Server



- Flexible I/O with Supermicro UIO (Universal I/O)
- Up to 768GB Registered ECC DDR3-1600/1333/1066 SDRAM in 24 DIMM Slots
- Redundant Gold Level Power Supply
- Supports 16/12/8/4-Core AMD Opteron™ 6000 Series Processors
- Available in 1U and 2U with Quad Gigabit Ethernet (Optional)

## 64-Core 1U 4-Way AMD Opteron™ Server for Enterprise & HPC



Supports 16/12/8/4-Core AMD Opteron™ 6000 Series Processor

- Enhanced Motherboard I/O Bandwidth and Performance
- Optimized for wire speed QDR InfiniBand with PCI-E 2.0 x16 slot

More Cores = More Performance

- 16/12/8/4-Core AMD Opteron Support, 64/48/32/16 Cores in 1U
- Best Dollar per Core Value

Peace of Mind & Low TCO

- IPMI 2.0 Management with KVM and Virtual Media Option
- Gold Level High-Efficiency Power Supplies

**Up to 512GB DDR3-1600/1333/1066**

**6 PCI-E 2.0 slots**

**6Gb/s SAS (SAS 2.0)**

**16/12/8/4-Core High-End DP Serverboard**



## SUPERO® H8DG6-F

The H8DG6-F is a high-performance serverboard that supports a large complement of 16 DIMMs for up to 512GB of Registered ECC DDR3-1600/1333/1066 high speed memory with the latest generation AMD Opteron™ 6300 series 16/12/8/4-Core Socket G34 processors. The H8DG6-F supports 3 PCI-E 2.0 x16, 1 PCI-E 2.0 x8, and 2 PCI-E 2.0 x4 (in x8 slots), which can accommodate up to 3 double-width enterprise level GPU cards operating with non-blocking native PCI-E 2.0 x16 connections. This feature rich high performance serverboard also provides 6 SAS 2.0 (6Gb/s) ports, dual Gigabit Ethernet LAN, and integrated IPMI. These cutting-edge features are integrated onto an Extended-ATX form factor and are backed by Supermicro's unrivaled product quality and support.

The large memory footprint and powerful processing capacity of the H8DG6-F provides ample capacity to handle huge data sets, complex applications, or highly virtualized applications with ease. The flexible PCI-E 2.0 configuration can scale with any application.

The H8DG6-F serverboard is optimized for general server and application server environments in medical, storage, HPC, gaming, oil and gas, finance and database vertical markets.

### Key Features

- Dual AMD Opteron™ 6000 Series processors (Socket G34) 16/12/8/4-Core ready
- 3.2 GHz HyperTransport (HT3.0) Link
- Up to 512GB of DDR3 Registered ECC 1600/1333/1066 or 128GB of DDR3 Unbuffered ECC/non-ECC SDRAM in 16 DIMM Slots
- 3 PCI-E 2.0 x16, 1 PCI-E 2.0 x8, 2 PCI-E 2.0 x4 (in x8) slots
- LSI 2008 SAS 2.0 (6Gb/s) 8-port Controller; RAID 0, 1, 10; RAID 5 (optional)
- 6 SATA 2.0 (3Gb/s), 8 USB
- 2 Gigabit Ethernet LAN with Intel® 82576 Controller
- Integrated Matrox G200eW graphics
- Winbond WPCM450 IPMI 2.0 Support
- 12" x 13" E-ATX form factor

**Up to 128GB DDR3-1600/1333/1066**

**3 PCI-E 2.0 slots**

**IPMI 2.0 onboard**

**8/6/4-Core UP Serverboard**



## SUPERO® H8SCM-F

The Supermicro H8SCM-F provides the latest, most advanced UP server technologies including massive 128GB DDR3-1600/1333/1066 high speed memory capacity, 3 PCI-E 2.0 and 1 PCI-32 expansion slots, 6 SATA 2.0 HDD ports, dual Gigabit Ethernet LAN, 7 USB connectors, and integrated IPMI 2.0 with KVM-over-LAN. The latest AMD Opteron™ 4200 Series 8/6/4-Core Socket C32 processors are supported. All these features are efficiently packaged into a 9.6" x 8.6" Micro-ATX form factor.

The H8SCM-F UP server platform is optimized for low dollar-per-core and high performance-per-watt server solutions where both cost and performance are critical design factors. This capability, and Supermicro's well-deserved reputation for quality, reliability and support, makes the H8SCM-F virtually unique in the UP serverboard space.

The H8SCM-F can be used in entry level, general purpose, application and appliance servers, engineering intensive applications, and in SMB and cloud computing environments.

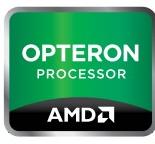
### Key Features

- Single AMD Opteron™ 4000 Series processor (Socket C32) 8/6/4-Core ready
- 2.6 GHz HyperTransport (HT3.0) Link
- Up to 128GB of DDR3 Registered ECC 1600/1333/1066 or 32GB DDR3 Unbuffered ECC/non-ECC SDRAM in 4 DIMM Slots
- 1 PCI-E 2.0 x8 (in x16), 1 PCI-E 2.0 x8, 1 PCI-E 2.0 x4 (in x8), 1 32-bit PCI slot
- 6 SATA2.0 (3Gb/s) ports via AMD SP5100 controller; RAID 0,1,10
- 2 Gigabit Ethernet LAN with Intel Hartwell 82574L controller
- Integrated Matrox G200eW graphics
- Winbond WPCM450 IPMI 2.0 Support
- 7 USB ports (2 rear, 4-port headers, 1 Type-A)
- 9.6" x 8.6" Micro-ATX form factor

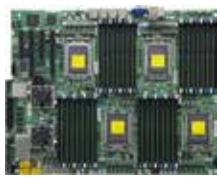


Supermicro installs safety caps on all serverboards to protect the CPU socket pins. Read and follow the important instructions on this protective cap to insure proper product safety.

**CPU Socket cap MUST always be installed when the CPU is not installed.**



**Opteron™ 6300  
CPU Ready**



**Opteron™ 6300  
CPU Ready**



**Opteron™ 6300  
CPU Ready**



MODEL	H8QG7-LN4F/H8QGi-LN4F H8QG7+-LN4F/H8QGi+-LN4F	H8QG6-F/H8QGi-F H8QG6+-F/H8QGi+-F	H8QGL-6F/H8QGL-iF H8QGL-6F+/H8QGL-iF+	H8QI6-F/H8QIi-F H8QI6+-F/H8QIi+-F	H8QM3-2/H8QMi-2 H8QM3-2+/H8QMi-2+
Processor	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	6-Core AMD Opteron™ 8000 Series Processors	6-Core AMD Opteron™ 8000 Series Processors
Chipset	AMD SR5690/SR5670 & SP5100 AMD SR5690/SP5100 (+ version only)	AMD SR5690/SP5100 & SP5100 AMD SR5690/SP5100 (+ version only)	Dual AMD SR5690/SP5100 AMD SR5690/SP5100 (+ version only)	AMD SR5690/SP5100	NVIDIA MCP55-Pro NEC 720400 PCI-X Bridge
Form Factor	SWTX 16.4" x 13"	SWTX 16.4" x 13"	SWTX 16.48" x 13"	SWTX 16.4" x 13"	SWTX 16.4" x 13"
Optimized Chassis	H8QG7+-LN4F/H8QGi+-LN4F: 1U: SC818TQ-I400LPB H8QG7-LN4F/H8QGi-LN4F: 2U: SC828TQ+-R1400LPB 4U: SC748TQ-R1400B SC848A-R1800B	H8QG6+-F/H8QGi+F: 1U: SC818TQ-I400LPB H8QG6-F/H8QGi-F: 2U: SC828TQ+-R1400LPB 4U: SC748TQ-R1400B SC848A-R1800B	H8QGL-6F+/H8QGL-iF+: 1U: SC818TQ-I400LPB H8QGL-6F/H8QGL-iF: 2U: SC828TQ+-R1400LPB 4U: SC748TQ-R1400B SC848A-R1800B	H8QI6+-F/H8QIi+F: 1U: SC818TQ+-R1000B H8QI6-F/H8QIi-F: 2U: SC828TQ-R1200LPB 4U: SC748TQ-R1200B** SC848A-R1800B**	H8QM3-2+/H8QMi-2+: 1U: SC818TQ+-R1000LPB** H8QM3-2/H8QMi-2: 2U: SC828TQ-R1200LPB** 4U: SC748TQ-R1200B** SC848TQ-R1800B**
Memory Capacity & Slots	1TB ECC Registered or 256GB unbuffered ECC/non-ECC DDR3 1600/1333/1066 SDRAM in 32 DIMMs	1TB ECC Registered or 256GB unbuffered ECC/non-ECC DDR3 1600/1333/1066 SDRAM in 32 DIMMs	512GB ECC Registered or 128GB unbuffered ECC/non-ECC DDR3 1866/1600/1333/1066 SDRAM in 16 DIMMs	128GB ECC Registered DDR2 800/667/533 SDRAM in 16 DIMMs	256GB ECC Registered DDR2 800/667/533 SDRAM in 32 DIMMs*
Expansion Slots	H8QG7-LN4F/H8QGi-LN4F: 2 PCI-E 2.0 x16; 2 PCI-E 2.0 x8; H8QG7+-LN4F/H8QGi+-LN4F: 1 PCI-E 2.0 x16	H8QG6-F/H8QGi-F: 2 PCI-E 2.0 x16; 1 PCI-E 2.0 x8; 1 PCI-E 2.0 x8 or 1 Universal I/O slot; H8QG6+-F/H8QGi+-F: 1 PCI-E 2.0 x16	H8QGL-6F/H8QGL-iF: 3 PCI-E 2.0 x16 2 PCI-E 2.0 x8 (in x16 slot) 1 PCI-E 2.0 x4 (in x16 slot) H8QGL-6F+/H8QGL-iF+: 1 HyperTransport slot 1 PCI-E 2.0 x16	H8QI6-F/H8QIi-F: 3 PCI-E 2.0 x16 1 PCI-E 2.0 x8 2 PCI-E 2.0 x4 (in x8 slot) 1 Universal I/O slot H8QI6+-F/H8QIi+F: 1 HyperTransport slot 1 PCI-E 2.0 x16	H8QM3-2/H8QMi-2: 2 PCI-E x16 1 PCI-E x8 1 PCI-E x4 (in x8 slot) 1 64-bit PCI-X 133 SIMLC slot H8QM3-2+/H8QMi-2+: 1 PCI-E x16 SIMLC slot
Onboard SAS/SCSI/SATA/RAID	LSI® 2208 SAS2 Controller for 8 SAS2 ports, HW RAID 0, 1, 5, 6, 10, 50, 60 (H8QG7-LN4F/H8QG7+-LN4F only) 6 SATA2 ports, RAID 0, 1, 10	LSI® 2008 SAS2 Controller for 8 SAS2 ports (H8QG6-F/H8QG6+-F only) 6 SATA2 ports, RAID 0, 1, 10	LSI® 2008 SAS2 Controller for 8 SAS2 ports (H8QGL-6F/H8QGL-6F+ only) 6 SATA2 ports, RAID 0, 1, 10	LSI® 2008 SAS2 Controller for 8 SAS2 ports (H8QI6-F/H8QI6+-F only) 6 SATA2 ports, RAID 0, 1, 10	LSI® 1068E SAS Controller for 8 SAS ports (H8QM3-2/H8QM3-2+) NVIDIA MCP55-Pro for 6 SATA2 ports, RAID 0, 1, 0+1, 5, JBOD
RAID Support	N/A	AOC-SAS2-RAID5-KEY (H8QG6(+)-F only)	AOC-SAS2-RAID5-KEY (H8QGL-6F+ only)	AOC-SAS2-RAID5-KEY (H8QI6(+)-F only)	AOC-iButton68 (H8QM3-2/H8QM3-2+ only)
Onboard LAN	Quad LAN with Intel® i350 Gigabit Ethernet	Dual LAN with Intel® 82576 Gigabit Ethernet	Dual LAN with Intel® 82576 Gigabit Ethernet	Dual LAN with Intel® 82576 Gigabit Ethernet	Dual LAN with Intel® 82546GB Gigabit Ethernet
Onboard VGA	Matrox G200eW graphics controller	Matrox G200eW graphics controller	Matrox G200eW graphics controller	Matrox G200eW graphics controller	ATI ES1000 16MB PCI graphics controller
Build-in EIDE/USB Ports	Up to 7 USB 2.0 ports	Up to 7 USB 2.0 ports	Up to 7 USB 2.0 ports	ATA133/100 Up to 6 USB 2.0 ports	ATA133/100 Up to 4 USB 2.0 ports
Other Onboard I/O Devices	1 SATA DOM power connector 1 fast UART 16550 serial port PS/2 mouse & keyboard conn. TPM header	1 SATA DOM power connector 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn. TPM header	1 SATA DOM power connector 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn. TPM header	1 DOM power connector 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn.	1 DOM power connector 1 floppy port 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn.
Manageability	Winbond WPCM450 BMC IPMI 2.0, KVM and VM options, Watch Dog, SuperDoctor III	Winbond WPCM450 BMC IPMI 2.0, KVM and VM options, Watch Dog, SuperDoctor III	Winbond WPCM450 BMC IPMI 2.0, KVM and VM options, Watch Dog, SuperDoctor III	Winbond WPCM450 BMC IPMI 2.0, KVM and VM options, Watch Dog, SuperDoctor III	SIMLC (IPMI 2.0) with KVM and virtual media option, Watch Dog, SuperDoctor III
PC Health Monitoring	Monitors CPU core voltages, +3.3V, +5V, +12V, 3.3V standby, VBAT, and total of 9-fan status, memory voltage, chipset voltage, supports system management utility, chassis intrusion header	Monitors CPU core voltages, +1.8V, 3.3V, +5V, +12V, 3.3V standby, VBAT, and total of 9-fan status, memory voltage, chipset voltage, supports system management utility, chassis intrusion header	Monitors CPU core voltages, +1.8V, 3.3V, +5V, +12V, 3.3V standby, VBAT, and total of 9-fan status, memory voltage, chipset voltage, supports system management utility, chassis intrusion header	Monitors CPU core voltages, +1.8V, 3.3V, +5V, +12V, 5V standby, VBAT, and total of 9-fan status, supports system management utility, chassis intrusion header	Monitors CPU core voltages, 3.3V, +5V, +12V, 5V standby, and total of 9-fan status, supports system management utility, chassis intrusion header
Thermal Control	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication
Other Features	ACPI power management, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, internal/external modem ring-on, WOL, control of power-on mode for recovery from AC power loss
BIOS	AMI 16 Mb SPI Flash ROM	AMI 16 Mb SPI Flash ROM	AMI 16 Mb SPI Flash ROM	AMI 16 Mb SPI Flash ROM	AMI 8 Mb Flash ROM

\* Fully populated DDR2 800/667 memory will be downgraded to DDR2 533

\*\* Please refer to page 5 for extra components needed.

# Optimized Chassis and Accessories



## SC818TQ Series

- 3 hot-swap drive bays
- 6 heavy duty counter-rotating fans
- 1400W **Gold Level** power supply
- Optimized for 1U 4-way systems
- 1U x 27.75"



## SC828TQ+-R1400LPB

- 6 hot-swap drive bays
- 6 hot-swap cooling fans
- 1400W **Gold Level** redundant power supplies
- 2U x 27.75"



## SC848TQ Series

- 24 hot-swap drive bays
- 7 hot-swap cooling fans
- 1800W high efficiency redundant power supplies
- 4U x 26"



## SC748TQ-R1000/R1200/R1400B

- 5 hot-swap SAS/SATA drive bays
- Up to 10 hot-swap drive bays
- 6 hot-swap cooling fans
- 1400W/1200W/1000W redundant power supplies
- 4U/Tower x 29.4"

MB Chassis	H8QG7-LN4F/H8QGi-LN4F/H8QG7+-LN4F/ H8QGi+-LN4F	H8QGL-6F/H8QGL-iF H8QGL-6F+/H8QGL-iF+	H8QI6-F/H8QIi-F H8QI6+-F/H8QIi+-F	H8QM3-2/H8QMi-2 H8QM3-2+/H8QMi-2+	H8QM8-2/H8QME-2 H8QM8-2+/H8QME-2+
SC818 Series	SC818TQ-1400LPB (SAS/SATA) • 3 hot-swap drive bays • 1400W power supply with I <sup>2</sup> C mgt. 1U Passive heatsink*: SNK-P0042P 1U Riser card*: CSE-RRIU-E16 Air shroud*: MCP-310-81807-0B	SC818TQ-1400B (SAS/SATA) • 3 hot-swap drive bays • 1400W power supply with I <sup>2</sup> C mgt. 1U Passive heatsink*: SNK-P0042P 1U Riser card*: CSE-RRIU-E16 Air shroud*: MCP-310-81808-0B	SC818TQ+-1000 (SAS/SATA) • 3 hot-swap drive bays • 1000W power supply with I <sup>2</sup> C mgt. 1U Passive heatsink*: SNK-P0022+ 1U Riser card*: CSE-RRIU-E16	SC818TQ+-1000LPB (SAS/SATA) • 3 hot-swap drive bays • 1000W power supply with I <sup>2</sup> C mgt. 1U Passive heatsink*: SNK-P0022+ 1U Riser card*: CSE-RRIU-E16	SC818TQ+-1000 (SATA) SC818S+-1000 (SCSI) • 3 hot-swap drive bays • 1000W power supply with I <sup>2</sup> C mgt. 1U Passive heatsink*: SNK-P0022+ 1U Riser cards*: CSE-RRIU-E16
SC828 Series	SC828TQ+-R1400LPB (SAS/ SATA) • 6 hot-swap drive bays • 1400W Redundant with I <sup>2</sup> C mgt. 2U Passive heatsink*: SNK-P0043P Air shroud*: MCP-310-82801-0N	SC828TQ+-R1400LPB (SAS/ SATA) • 6 hot-swap drive bays • 1400W Redundant with I <sup>2</sup> C mgt. 2U Passive heatsink*: SNK-P0043P Air shroud*: MCP-310-82801-0N	SC828TQ+-R1400LPB (SAS/ SATA) • 6 hot-swap drive bays • 1400W Redundant with I <sup>2</sup> C mgt. 2U Passive heatsink*: SNK-P0023P+ Air shroud*: MCP-310-82801-0N	SC828TQ+-R1400LPB (SAS/ SATA) • 6 hot-swap drive bays • 1400W Redundant with I <sup>2</sup> C mgt. 2U Passive heatsink*: SNK-P0023P+ Air shroud*: MCP-310-82801-0N	SC828TQ+-R1400LPB (SAS/ SATA) 6 hot-swap drive bays 1400W Redundant with I <sup>2</sup> C mgt. 2U Passive heatsink*: SNK-P0023P+ Air shroud*: MCP-310-82801-0N
SC748 Series	SC748TQ-R1400B (SAS/SATA) • 5 hot-swap drive bays • 1400W Redundant with I <sup>2</sup> C mgt. 2U Passive heatsink*: SNK-P0043P Air shroud*: MCP-310-74802-0B Mounting Rails*: MCP-290-00059-0B	SC748TQ-R1400B (SAS/SATA) • 5 hot-swap drive bays • 1400W Redundant with I <sup>2</sup> C mgt. 2U Passive heatsink*: SNK-P0043P Air shroud*: CSE-PT0125 Mounting Rails*: MCP-290-00059-0B	SC748TQ-R1200B (SAS/SATA) • 5 hot-swap drive bays • 1200W Redundant with I <sup>2</sup> C mgt. 2U Passive heatsink*: SNK-P0023P+ Mounting Rails*: MCP-290-00059-0B	SC748TQ-R1200B (SAS/SATA) • 5 hot-swap drive bays • 1200W Redundant with I <sup>2</sup> C mgt. 2U Passive heatsink*: SNK-P0023P+ Mounting Rails*: MCP-290-00059-0B	SC748TQ-R1000B (SATA) SC748S-R1000B (SCSI) • 5 hot-swap drive bays • 1000W Redundant with I <sup>2</sup> C mgt. 2U Passive Heatsink*: SNK-P0023P+ Mounting Rails*: MCP-290-00059-0B
SC848 Series	SC848A-R1800B (SAS/SATA) • 24 hot-swap 3.5" drive bays • Redundant (2+1) 1800W with I <sup>2</sup> C mgt. 2U Passive heatsink*: SNK-P0043P Air shroud*: MCP-310-84802-0B	SC848A-R1800B (SAS/SATA) • 24 hot-swap 3.5" drive bays • Redundant (2+1) 1800W with I <sup>2</sup> C mgt. 2U Passive heatsink*: SNK-P0043P Air shroud*: MCP-310-84802-0B	SC848A-R1800B (SAS/SATA) • 24 hot-swap 3.5" drive bays • Redundant (2+1) 1800W with I <sup>2</sup> C mgt. 2U Passive heatsink*: SNK-P0023P+ Air shroud*: MCP-310-84802-0B	SC848A-R1800B (SAS/SATA) • 24 hot-swap 3.5" drive bays • Redundant (2+1) 1800W with I <sup>2</sup> C mgt. 2U Passive heatsink*: SNK-P0023P+ Air shroud*: MCP-310-84801-0B	SC848A-R1800B (SAS/SATA) • 24 hot-swap 3.5" drive bays • Redundant (2+1) 1800W with I <sup>2</sup> C mgt. 2U Passive heatsink*: SNK-P0023P+ Air shroud*: MCP-310-84801-0B

Note: Please refer to website for the most updated compatible chassis revision

\* Sold separately

**Opteron™ 6300**  
**CPU Ready**

**Opteron™ 6300**  
**CPU Ready**



MODEL	<b>H8QM8-2/H8QME-2</b> <b>H8QM8-2+/H8QME-2+</b>	<b>H8DGU-LN4F+</b>	<b>H8DGU(-F)</b>	<b>H8DMU+</b>	<b>H8DM8-2/</b> <b>H8DME-2</b>
Processor	6-Core AMD Opteron™ 8000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	6-Core AMD Opteron™ 2000 Series Processors	6-Core AMD Opteron™ 2000 Series Processors
Chipset/System Bus	NVIDIA MCP55-Pro AMD 8132 PCI-X Tunnel	AMD SR5690/SP5100	AMD SR5670/SP5100	NVIDIA MCP55-Pro	NVIDIA MCP55-Pro NEC 720400 PCI-X Bridge
Form Factor	SWTX 16" x 13"	Proprietary 12.8" x 16.5"	Proprietary 12.1" x 13"	EATX 12.175" x 13.05"	EATX 12" x 13.05"
Optimized Chassis	<b>H8QM8-2+:</b> SC818S+-1000B <b>H8QME-2+:</b> SC818TQ+-1000B <b>H8QM8-2:</b> SC748S-R1000B <b>H8QME-2:</b> SC828TQ-R1200LPB SC748TQ-R1000B SC848TQ-R1800B	1U: SC819TQ-R700UB SC119TQ-R700UB 2U: SC829TQ-R920UB SC219A-R920UB	1U: SC815TQ-720UB/563UB SC113TQ-700UB/563UB 2U: SC825TQ-R720UB SC213A-R900UB SC216A-R900UB	1U: SC113TQ-R700UB** SC113TQ-563UB** SC815TQ-R700UB** SC815TQ-563UB** 2U: SC213A-R900UB** SC216A-R900UB** SC825TQ-R700UB** SC825MTQ-R700UB**	<b>H8DME-2:</b> 2U: SC825S2-R700LPB** 3U: SC836S2-R800B 4U: SC745S2-R800B** SC743S1/SC743S2-R760B
Memory Capacity & Slots	128GB ECC Registered DDR2 800/667/533 SDRAM in 16 DIMMs	768GB ECC Registered or 128GB unbuffered ECC/non-ECC DDR3 1600/1333/1066 SDRAM in 24 DIMMs	512GB ECC Registered or 128GB unbuffered ECC/non-ECC DDR3 1600/1333/1066 SDRAM in 16 DIMMs	128GB ECC Registered DDR2 800/667/533 SDRAM in 16 DIMMs*	128GB ECC Registered DDR2 800/667/533 SDRAM in 16 DIMMs*
Expansion Slots	<b>H8QM8-2/H8QME-2:</b> 2 HyperTransport slot 1 PCI-E x16 1 PCI-E x8 2 PCI-X 133/100 MHz 2 PCI-X 100 MHz SIMSO socket <b>H8QM8-2+/H8QME-2+:</b> 1 HyperTransport slot 1 PCI-E x16 SIMSO socket	1U Left Slot: 1 PCI-E 2.0 x16 and UIO or 2 PCI-E 2.0 x8 or 1 PCI-E 2.0 x16 or 1 PCI-E 2.0 x8 and UIO 2U Left Slot: 2 PCI-E 2.0 x8 and UIO or 3 PCI-E 2.0 x8 or 1 PCI-E 2.0 x16 and UIO 2U Right Slot: 3 PCI-E 2.0 (x4 + x1 + x1) (via RSC-R2UU-2E2E4R Riser Card)	1U Left Slot: 1 PCI-E 2.0 x16 and UIO or 2 PCI-E 2.0 x8 or 1 PCI-E 2.0 x16 or 1 PCI-E 2.0 x8 and UIO 2U Left Slot: 2 PCI-E 2.0 x8 and UIO or 3 PCI-E 2.0 x8 or 1 PCI-E 2.0 x16 and UIO	1U Left Slot: 1 PCI-E x8 and UIO 2U Left Slot: 2 PCI-E x8 and UIO 2U Right Slot: 1/1 PCI-E x8/x4 SIMSO socket	2 PCI-E x8 2 64-bit PCI-X 133/100 MHz 2 64-bit PCI-X 100 MHz SIMLC slot
Onboard SAS/SCSI/SATA/RAID	Adaptec 7902W dual-channel Ultra320 SCSI with host RAID (H8QM8-2/H8QME-2+ only) NVIDIA MCP55-Pro for 6 SATA2 ports, RAID 0, 1, 0+1, 5, JBOD	6 SATA2 ports, RAID 0, 1, 10	6 SATA2 ports, RAID 0, 1, 10	NVIDIA MCP55-Pro for 6 SATA2 ports, RAID 0, 1, 0+1, 5, JBOD	Adaptec 7902W dual-channel Ultra320 SCSI with host RAID (H8DM8-2 only) NVIDIA MCP55-Pro for 6 SATA2 ports, RAID 0, 1, 0+1, 5, JBOD
RAID Support	AOC-LPZCR1 or AOC-LPZCR2 (H8QM8-2/H8QME-2+ only)	N/A	N/A	N/A	AOC-LPZCR1 or AOC-LPZCR2 (H8DM8-2 only)
Onboard LAN	Dual LAN with Intel® 82546GB Gigabit Ethernet	Four LAN with two Intel® 82576GB Gigabit Ethernet	Dual LAN with Intel® 82576GB Gigabit Ethernet	Dual LAN with NVIDIA MCP55-Pro Gigabit Ethernet	Dual LAN with NVIDIA MCP55-Pro Gigabit Ethernet
Onboard VGA	ATI ES1000 16MB PCI graphics controller	Matrox G200eW graphics controller	Matrox G200eW graphics controller	ATI ES1000 16MB PCI graphics controller	ATI ES1000 16MB PCI graphics controller
Build-in EIDE/USB Ports	ATA133/100 Up to 4 USB 2.0 ports	Up to 7 USB 2.0 ports	Up to 7 USB 2.0 ports	Single ATA133/100 Up to 6 USB 2.0 ports	Single ATA133/100 Up to 6 USB 2.0 ports
Other Onboard I/O Devices	1 DOM power connector 1 floppy port 2 fast UART 16550 serial port 1 ECP/EPP parallel port PS/2 mouse & keyboard conn.	1 SATA DOM power connector TPM header 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn.	1 SATA DOM power connector TPM header 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn.	1 DOM power connector 1 floppy port 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn.	1 DOM power connector 1 floppy port 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn.
Manageability	SIMSO(+) (IPMI 2.0) with virtual media option, Watch Dog, SuperDoctor III	IPMI 2.0 + KVM with dedicated LAN, Watch Dog, SuperDoctor III	IPMI 2.0 + KVM with dedicated LAN (F version only), Watch Dog, SuperDoctor III	SIMSO(+) (IPMI 2.0) with KVM and virtual media option, Watch Dog, SuperDoctor III	SIMLC (IPMI 2.0) with KVM and virtual media option, Watch Dog, SuperDoctor III
PC Health Monitoring	Monitors CPU core voltages, +5V, +12V, 3.3V, 5V standby, VBAT, and total of 9-fan status, supports system management utility, chassis intrusion header	Monitors CPU core voltages, 3.3V, +5V, +12V, -12V, 3.3V standby, 1.5V, VBAT, HyperTransport™ technology voltage 1.2V, memory voltage, and total of 8-fan status, supports system management utility, mem VTT, chassis intrusion header	Monitors CPU core voltages, 3.3V, +5V, +12V, -12V, 3.3V standby, 1.5V, VBAT, HyperTransport™ technology voltage 1.2V, memory voltage, and total of 8-fan status, supports system management utility, mem VTT, chassis intrusion header	Monitors CPU core voltages, +1.5V, +3.3V, +5V, +12V, -12V, 5V standby, 1.5V, VBAT, HyperTransport™ technology voltage 1.2V, memory voltage 1.8V, and total of 8-fan status, supports system management utility, mem VTT, MCP55 Vcore, chassis intrusion header	Monitors CPU core voltages, +1.5V, +3.3V, +5V, +12V, -12V, 5V standby, 1.5V, VBAT, HyperTransport™ technology voltage 1.2V, memory voltage 1.8V, and total of 8-fan status, supports system management utility, mem VTT, MCP55 Vcore, chassis intrusion header
Thermal Control	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication
Other Features	ACPI power management, internal/external modem ring-on, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, internal/external modem ring-on, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, internal/external modem ring-on, WOL, control of power-on mode for recovery from AC power loss
BIOS	AMI 8 Mb Flash ROM	AMI 16 Mb SPI Flash ROM	AMI 16 Mb SPI Flash ROM	AMI 8 Mb Flash ROM	AMI 8 Mb Flash ROM

\* Fully populated DDR2 800/667 memory will be downgraded to DDR2 533

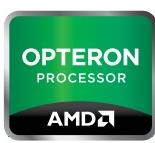
\*\* Please refer to page 7 for extra components needed.

# Optimized Chassis and Accessories

<b>MB Chassis</b>	<b>H8DGU-LN4F+</b>	<b>H8DGU(-F)</b>	<b>H8DMU+</b>	<b>H8DM8-2 H8DME-2</b>
<b>SC113 Series</b>		SC113TQ-R700UB/563UB (SAS/SATA) • 8 hot-swap 2.5" drive bays • 700W Redundant/563W with I <sup>C</sup> mgt. IU Passive heatsink*: SNK-P0042P IU Riser cards*: RSC-R1UU-UE8	SC113TQ-R700UB/563UB (SAS/SATA) • 8 hot-swap 2.5" drive bays • 700W/563W Redundant with I <sup>C</sup> mgt. IU Passive heatsink*: SNK-P0022+ IU Riser card*: RSC-R1UU-UE8 Air shroud*: MCP-310-00026-01	
<b>SC119 Series</b>	SC119TQ-R700UB (SAS/SATA) • 8 hot-swap 2.5" drive bays • 700W Redundant with I <sup>C</sup> mgt. IU Passive heatsink*: SNK-P0042P IU Riser cards*: RSC-R1UU-UE8 Air shroud*: TBD			
<b>SC815 Series</b>		SC815TQ-R700UB/563UB • 4 hot-swap drive bays • 700W Redundant/563W with I <sup>C</sup> mgt. IU Passive heatsink*: SNK-P0042P IU Riser cards*: RSC-R1UU-UE8	SC815TQ-R700UB/563UB • 4 hot-swap drive bays • 700W Redundant/563W with I <sup>C</sup> mgt. IU Passive heatsink*: SNK-P0022+ IU Riser cards*: RSC-R1UU-UE8 Air shroud*: MCP-310-0026-01	
<b>SC819 Series</b>	SC819TQ-R700UB (SAS/SATA) • 4 hot-swap drive bays • 700W Redundant with I <sup>C</sup> mgt. IU Passive heatsink*: SNK-P0042P IU Riser cards*: RSC-R1UU-UE8 Air shroud*: TBD			
<b>SC745 Series</b>				SC745S2-R800B/800B (SCSI) SC745TQ-R800B/800B/R920B (SATA) • 8 hot-swap drive bays • 100% Cooling & High Performance • 4U/x25.5 Tower convertible • 800W redundant/single 800W power Passive heatsink* SNK-P0023P Air shroud*: CSE-PT0123
<b>SC213 Series</b>		SC213A-R900UB (SAS/SATA) • 16 hot-swap 2.5" drive bays • Redundant 900W with I <sup>C</sup> mgt. 2U Passive heatsink*: SNK-P0043P 2U Riser cards*: RSC-R2UU-UA3E8+	SC213A-R900UB (SAS/SATA) • 16 hot-swap 2.5" drive bays • Redundant 900W with I <sup>C</sup> mgt. 2U Passive heatsink*: SNK-P0023P 2U Riser cards*: RSC-R2UU-UA3E8 (Left slot) RSC-R2UU-2E8R (Right slot) Air shroud*: MCP-310-00025-01	SC213A-R900LPB (SAS/SATA) SC213E1-R900LPB • 16 hot-swap 2.5" drive bays • Redundant 900W with I <sup>C</sup> mgt. Passive heatsink*: SNK-P0023P Air shroud*: MCP-310-00025-01
<b>SC216 Series</b>		SC216A-R900UB (SAS/SATA) SC216E16/E26-R1200UB • 24 hot-swap 2.5" drive bays • Redundant 900W with I <sup>C</sup> mgt. 2U Passive heatsink*: SNK-P0043P 2U Riser cards*: RSC-R2UU-UA3E8+	SC216A-R900UB (SAS/SATA) SC216E16/E26-R1200UB • 24 hot-swap 2.5" drive bays • Redundant 900W with I <sup>C</sup> mgt. • 2U Passive heatsink*: SNK-P0023P 2U Riser cards*: RSC-R2UU-UA3E8 (Left slot) RSC-R2UU-2E8R (Right slot) Air shroud*: MCP-310-00025-01	SC216A-R900LPB (SAS/SATA) SC216E16/E26-R1200UB • 24 hot-swap 2.5" drive bays • Redundant 900W with I <sup>C</sup> mgt. Passive heatsink*: SNK-P0023P Air shroud*: MCP-310-00025-01
<b>SC219 Series</b>	SC219A-R920UB (SAS/SATA) SC219AQ-R920LPB • 16 hot-swap 2.5" drive bays • 920W Redundant with I <sup>C</sup> mgt. 2U Passive heatsink*: SNK-P0043P 2U Riser card*: RSC-R2UU-UA3E8+ Air shroud*: MCP-310-82902-0N			
<b>SC825 Series</b>		SC825TQ-R720UB/563UB • 8 hot-swap drive bays • 720W Redundant with I <sup>C</sup> mgt. 2U Passive heatsink*: SNK-P0043P 2U Riser cards*: RSC-R2UU-U3E8+ Air shroud*: MCP-310-0025-01	SC825TQ-R720UB/563UB • 8 hot-swap drive bays • 700W Redundant with I <sup>C</sup> mgt. 2U Passive heatsink*: SNK-P0023P 2U Riser card*: RSC-R2UU-UA3E8 (Left slot), RSC-R2UU-UE8R (Right slot) Air shroud*: MCP-310-0025-01	SC825TQ-R720LPB/563LPB • 8 hot-swap drive bays • Redundant 700W power supply • High Efficiency Power Passive heatsink*: SNK-P0023P Air shroud*: MCP-310-00025-01
<b>SC829 Series</b>	SC829TQ-R920UB (SAS/SATA) SC829TQ-R920LPB • 8 hot-swap drive bays • 920W Redundant with I <sup>C</sup> mgt. 2U Passive heatsink*: SNK-P0043P 2U Riser cards*: RSC-R2UU-UA3E8+ Air shroud*: MCP-310-82902-0N			
<b>SC836 Series</b>				SC836A-R1200B, SC836TQ-R800B SC836E2/SC836E1-R800B SC836E16/SC836E26-R1200B • 16 hot-swap drive bays • 800W Redundant power supplies w/I <sup>C</sup> mgt. Passive heatsink*: SNK-P0023P Air shroud*: MCP-310-00004-00

Note: Please refer to website for the most updated compatible chassis revision

\* Sold separately



MODEL	H8DM3-2/ H8DMi-2	H8DCL-6(F)/ H8DCL-i(F)	H8DG6-(F)/ H8DGi-(F)	H8DI3+(-F)/ H8Dii+(-F)	H8DA6+(-F)/ H8DAi+(-F)
Processor	6-Core AMD Opteron™ 2000 Series Processors	8/6/4-Core AMD Opteron™ 4000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	6-Core AMD Opteron™ 2000 Series Processors	6-Core AMD Opteron™ 2000 Series Processors
Chipset/System Bus	NVIDIA MCP55-Pro AMD 8132 PCI-X Tunnel	AMD SR5690/SP5100	Dual AMD SR5690/SP5100	AMD SR5690/SP5100 NEC 720400 PCI-X Bridge	Dual AMD SR5690/SP5100
Form Factor	EATX 12" x 13.05"	ATX 12" x 10"	EATX 12" x 13"	EATX 12" x 13"	EATX 13.68" x 13.05"
Optimized Chassis	2U: SC825TQ-R700/720LPB** SC213A-R900LPB SC216A-R900LPB 3U: SC836TQ-R800B SC833TQ-R760B 4U: SC745TQ-R800B/R920B** SC743TQ/i-R760B/865B	3U: SC835TQ-R920B SC936A-R900B/1200B 4U: SC842TQ-665/865 Mid-tower: SC732I-500B	2U: SC825TQ-R720LPB** SC213A-R900LPB SC213E1-R900LPB SC216A-R900LPB 3U: SC836A-R1200B SC835TQ-R920B 4U: SC747TQ-R1400 SC745TQ-R800B** SC743TQ-865B	2U: SC825TQ-R720LPB** SC213A-R900LPB SC213E1-R900LPB SC216A-R900LPB 3U: SC836A-R1200B SC835TQ-R920B 4U: SC747TQ-R800B** SC745TQ-R920B SC743TQ-865B	4U: SC747TG-R1400B-SQ SC745TQ-R800B/R920B
Memory Capacity & Slots	64GB ECC Registered DDR2 800/667/533 SDRAM in 8 DIMMs	256GB ECC Registered or 64 GB unbuffered ECC/non-ECC DDR3 1600/1333/1066 SDRAM in 8 DIMMs	512GB ECC Registered or 128GB unbuffered ECC/non-ECC DDR3 1600/1333/1066 SDRAM in 16 DIMMs	128GB ECC Registered DDR2 800/667/533 SDRAM in 16 DIMMs*	128GB ECC Registered DDR2 800/667/533 SDRAM in 16 DIMMs*
Expansion Slots	2 PCI-E x8 1 PCI-E x4 (using x8 slot) 2 64-bit PCI-X 133/100 MHz 1 64-bit PCI-X 133 MHz SIMPL slot	1 PCI-E 2.0 x8 (using in x16 slot) 3 PCI-E 2.0 x8 1 PCI-E 2.0 x4 (using in x8 slot) 1 PCI	3 PCI-E 2.0 x16 1 PCI-E 2.0 x8 2 PCI-E 2.0 x4 (using x8 slot)	2 PCI-E 2.0 x8 (using x16 slot) 1 PCI-E 2.0 x4 (using x8 slot) 1 PCI-E x8 2 64-bit PCI-X 133/100 MHz	4 PCI-E 2.0 x16 2 PCI-E 2.0 x4 (using x8 slots) 1 32-bit PCI
Onboard SAS/SCSI/SATA/RAID	LSI® 1068E SAS Controller (H8DM3-2 only) NVIDIA MCP55-Pro for 6 SATA2 ports, RAID 0, 1, 0+1, 5, JBOD	LSI® 2008 SAS2 Controller (H8DCL-6(F) only) 6 SATA2 ports, RAID 0, 1, 10	LSI® 2008 SAS2 Controller (H8DG6-(F) only) 6 SATA2 ports, RAID 0, 1, 10	LSI® 1068E SAS Controller (H8DI3+ only) 6 SATA2 ports, RAID 0, 1, 10	LSI® 2008 SAS2 Controller for 8 SAS2/SATA ports (H8DA6+ only) 6 SATA2 ports, RAID 0, 1, 10
RAID Support	AOC-iButton68 (H8DM3-2 only)	AOC-SAS2-RAID5-KEY (H8DCL-6(F) only)	AOC-SAS2-RAID5-KEY (H8DG6-(F) only)	AOC-iButton68 (H8DI3+ only)	AOC-SAS2-RAID5-KEY (H8DA6+(-F) only)
Onboard LAN	Dual LAN with NVIDIA MCP55-Pro Gigabit Ethernet	Dual LAN with two Intel® 82574L Gigabit Ethernet	Dual LAN with Intel® 82576 Gigabit Ethernet	Dual LAN with two Intel® 82576 Gigabit Ethernet	Dual LAN with Intel® 82576 Gigabit Ethernet
Onboard VGA	ATI ES1000 16MB PCI graphics controller	Matrox G200eW graphics controller	Matrox G200eW graphics controller	Matrox G200eW graphics controller	Matrox G200eW graphics controller
Build-in EIDE/USB Ports	Single ATA133/100 Up to 6 USB 2.0 ports	Up to 7 USB 2.0 ports	Up to 8 USB 2.0 ports	Single ATA133/100 Up to 6 USB 2.0 ports	Single ATA133/100 Up to 10 USB 2.0 ports
Other Onboard I/O Devices	1 DOM power connector 1 floppy port 1 ECP/EPP parallel port 2 fast UART 16550 serial PS/2 mouse & keyboard conn.	1 SATA DOM power connector TPM header 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn.	1 SATA DOM power connector TPM header 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn.	1 DOM power connector 1 floppy port 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn.	1 DOM power connector 2 fast UART 16550 serial ports 2 IEEE 1394 single port w/ header PS/2 mouse & keyboard conn. HD Audio Front-side audio header
Manageability	SIMPL(+)(IPMI 2.0) with KVM and virtual media option, Watch Dog, SuperDoctor III	IPMI 2.0 + KVM with dedicated LAN (F version only), Watch Dog, SuperDoctor III	IPMI 2.0 + KVM with dedicated LAN (F version only), Watch Dog, SuperDoctor III	IPMI 2.0 + KVM with dedicated LAN (F version only), Watch Dog, SuperDoctor III	IPMI 2.0 + KVM with dedicated LAN (F version only), Watch Dog, SuperDoctor III
PC Health Monitoring	Monitors CPU core voltages, +3.3V, +5V, +12V, -12V, 3.3V standby, VBAT, HyperTransport™ technology voltage 1.2V, memory voltage, and total of 8-fan status, supports system management utility, chassis intrusion header	Monitors CPU core voltages, 3.3V, +5V, +12V, 3.3V standby, VBAT, HyperTransport™ technology voltage 1.2V, memory voltage, and total of 8-fan status, supports system management utility, mem VTT, chassis intrusion header	Monitors CPU core voltages, 3.3V, +5V, +12V, 3.3V standby, 1.5V, VBAT, HyperTransport™ technology voltage 1.2V, memory voltage, and total of 8-fan status, supports system management utility, mem VTT, chassis intrusion header	Monitors CPU core voltages, 1.8V, 3.3V, +5V, +12V, -12V, 3.3V standby, 1.5V, VBAT, HyperTransport™ technology voltage 1.2V, memory voltage 1.8V, and total of 8-fan status, supports system management utility, mem VTT, chassis intrusion header	Monitors CPU core voltages, 1.8V, 3.3V, +5V, +12V, -12V, 5V standby, 3.3V standby, VBAT, HyperTransport™ technology voltage 1.2V, memory voltage 1.8V, CHP, and total of 8-fan status, supports system management utility, chassis intrusion header
Thermal Control	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication	PWM Fan speed control & overheat LED indication
Other Features	ACPI power management, internal/external modem ring-on, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, WOL, control of power-on mode for recovery from AC power loss & S3 STR support	ACPI power management, WOL, control of power-on mode for recovery from AC power loss & S3 STR support
BIOS	AMI 8 Mb Flash ROM	AMI 16 Mb SPI Flash ROM	AMI 16 Mb SPI Flash ROM	AMI 16 Mb SPI Flash ROM	AMI 16 Mb SPI Flash ROM

\* Fully populated DDR2 800/667 memory will be downgraded to DDR2 533

\*\* Please refer to page 9 for extra components needed.

## Optimized Chassis and Accessories



**SC213 Series**

- 16 hot-swap 2.5" SAS/SATA drive bays
- UIO optimized
- **Platinum Level** 740W redundant power supplies with I<sup>C</sup> mgt.
- 2U x 25.5"



**SC747TG-R1620B-SQ**

- Optimized for GPU, supports up to 4 GPU cards
- 8 hot-swap drive bays
- 90-degree rotatable drive bay module
- **Platinum Level** 1620W redundant power supplies
- Hot-swap redundant PWM cooling fans
- 4U/Tower x 29.4"



**SC836 Series**

- 16 hot-swap SAS(2) drive bays
- Up to 7 expansion slots
- **Platinum Level** 500W/920W redundant power supplies with PM Bus
- 3U x 25.5"



**SC825TQ-R740LPB**

- 8 dual-channel (4+4) hot-swap drive bays w/SAF-TE (SC825S2)
- 8 hot-swap SAS/SATA drive bays (SC825TQ)
- Up to 7 low profile expansion cards
- **Platinum Level** 740W high efficiency redundant power supplies with I<sup>C</sup> mgt.
- 2U x 25.5"



**SC745 Series**

- 8 hot-swap drive bays
- Tower/4U rackmount server chassis
- 7 Tool-less expansion slots
- 90-degree rotatable drive bay module
- 100% cooling redundancy
- **Platinum Level** Redundant power supplies with PMBus
- 4U/Tower x 25.5"



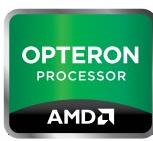
**SC743 Series**

- 8 hot-swap drive bays
- 7 Tool-less expansion slots
- 90-degree rotatable drive bay module
- 1200W **Platinum Level** low noise power supply
- Hot-swap redundant PWM cooling fans
- 4U/Tower x 25.5"

Chassis \ MB	H8DM3-2 H8DM-i2	H8DCL-6(F) H8DCL-i(F)	H8DG6(-F) H8DGI(-F)	H8DI3+(F) H8DII+(F)	H8DA6+(F) H8DAi+(F)
SC747 Series			SC747TQ/TG-R1620(-SQ) • Supports GPU • 8 hot-swap drive bays • 4U/x29.4 Tower convertible • Gold Level 1400W redundant power supplies		SC747TG-R1400-SQ • Optimized for GPU • 8 hot-swap drive bays • 4U/x29.4 Tower convertible • Gold Level 1400W redundant power supplies Active heatsink*: SNK-P0024PA4
SC745 Series	SC745TQ-R800B/R920B (SAS/SATA) • 4U/25.5" Tower convertible • 8 hot-swap drive bays • 800W redundant/single 800W power Passive heatsink*: SNK-P0023P Air shroud*: CSE-PT0123	SC745TQ-R920 • 8 hot-swap drive bays • 100% Cooling & High Performance • 4U/x25.5" Tower convertible • 920W redundant power Active heatsink* SNK-P0024P4	SC745TQ-R1200B/R920 • 8 hot-swap drive bays • 100% Cooling & High Performance • 4U/x25.5" Tower convertible • 1200W redundant/single 920W power Passive heatsink* SNK-P0043P Air shroud*: MCP-310-48001-ON	SC745TQ-R1200B/R920B • 8 hot-swap drive bays • 100% Cooling & High Performance • 4U/x25.5" Tower convertible • 1200W/920W redundant power Passive heatsink* SNK-P0023P Air shroud*: CSE-PT0123	SC745TQ-R800B/800B/R920B • 8 hot-swap drive bays • 100% Cooling & High Performance • 4U/x25.5" Tower convertible • 800W redundant/single 800W power Passive heatsink*: SNK-P0023P Air shroud*: CSE-PT0123
SC743 Series		SC743TQ-665/650/865 • 4U/Tower convertible • 8 hot-swap drive bays • 665W/650W/865W power supply Active heatsink*: SNK-P0024P4	SC743TQ-665/865 • 4U/Tower convertible • 8 hot-swap drive bays • 665W/650W/865W power supply Passive heatsink*: SNK-P0043P Air shroud*: MCP-310-48002-ON	SC743TQ-665B/865B • 4U/Tower convertible • 8 hot-swap drive bays • 665W/650W/865W power supply Passive heatsink*: SNK-P0023P Air shroud*: CSE-PT0123	
SC213 Series	SC213A-R900LPB (SAS/SATA) SC213E1-R900LPB • 16 hot-swap 2.5" drive bays • Redundant 900W with I <sup>C</sup> mgt. Passive heatsink*: SNK-P0023P Air shroud*: MCP-310-00025-01		SC213A-R900LPB SC213E1-R900LPB • 16 hot-swap 2.5" drive bays • Redundant 900W with I <sup>C</sup> mgt. Passive heatsink*: SNK-P0043P	SC213A-R900LPB SC213E1-R900LPB • 16 hot-swap 2.5" drive bays • Redundant 900W with I <sup>C</sup> mgt. Passive heatsink*: SNK-P0023P+ Air shroud*: MCP-310-82510-0B	
SC216 Series	SC216A-R900LPB (SAS/SATA) SC216E16/E26-R1200UB • 24 hot-swap 2.5" drive bays • Redundant 900W with I <sup>C</sup> mgt. Passive heatsink*: SNK-P0023P Air shroud*: MCP-310-00025-01		SC216A/E1/E2-R900LPB SC216E16/E26-R1200LPB • 24 hot-swap 2.5" drive bays • Redundant 900W/1200W with I <sup>C</sup> mgt. Passive heatsink*: SNK-P0043P	SC216A/E1/E2-R900LPB SC216E16/E26-R1200LPB • 24 hot-swap 2.5" drive bays • Redundant 900W/1200W with I <sup>C</sup> mgt. Passive heatsink*: SNK-P0023P+ Air shroud*: MCP-310-82510-0B	
SC825 Series	SC825TQ-R720LPB/563LPB • 8 hot-swap drive bays • 700W redundant power supplies • High Efficiency Power Passive heatsink*: SNK-P0023P Air shroud*: MCP-310-00030-01		SC825TQ-R720LPB/563LPB • 8 hot-swap drive bays • Redundant 720W/563W power supply • High Efficiency Power Passive heatsink*: SNK-P0043P	SC825TQ-R720LPB/563LPB • 8 hot-swap drive bays • Redundant 720W/563W power supply • High Efficiency Power Passive heatsink*: SNK-P0023P+ Air shroud*: MCP-310-82510-0B	
SC836 Series	SC836A-R1200B SC836E16/SC836E26-R1200B • 16 hot-swap drive bays • 800W Redundant power supplies w/I <sup>C</sup> mgt. Passive heatsink*: SNK-P0023P		SC836A-R1200B SC836E1/E2-R800B SC836E16/E26-R1200B • 16 hot-swap drive bays • 1200W/800W Redundant power supplies with I <sup>C</sup> mgt. Passive heatsink*: SNK-P0043P	SC836A-R1200B SC836E1/E2-R800B SC836E16/E26-R1200B • 16 hot-swap drive bays • 1200W/800W Redundant power supplies with I <sup>C</sup> mgt. Passive heatsink*: SNK-P0023P Air shroud*: MCP-310-00004-00	

Note: Please refer to website for the most updated compatible chassis revision

\* Sold separately



MODEL	H8SML-7/i(F)	H8DA3-2/ H8DAi-2	H8SGL(-F)	H8SCM(-F)	H8SMA-2/ H8SMi-2
Processor	8/4-Core AMD Opteron™ 3000 Series Processors	6-Core AMD Opteron™ 2000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	8/6/4-Core AMD Opteron™ 4000 Series Processors	Quad-Core AMD Opteron™ 1000 Series Processors
Chipset/System Bus	AMD SR5650/SP5100	NVIDIA MCP55-Pro + IO55	AMD SR5650/SP5100	AMD SR5650/SP5100	NVIDIA MCP55-Pro
Form Factor	Micro ATX 9.6" x 9.6"	EATX 12" x 13.05"	ATX 12" x 8"	Micro ATX 9.6" x 8.6"	ATX 12" x 9.6"
Optimized Chassis	Mini IU: SC512F-350B IU: SC813MTQ-350CB SC811TQ-350B SC113MTQ-330CB	4U: SC743TQ-665B Mid-Tower: SC732i-865B	Mini IU: SC512F-350B IU: SC813MTQ-350CB SC811TQ-350B SC113MTQ-330CB	Mini IU: SC512F-350B IU: SC813MTQ-350CB SC811TQ-350B SC111LT-330CB/360CB SC113MTQ-330CB Mid-Tower: SC731D/i-300B	H8SMi-2: IU: SC512F-260 SC811T-300
Memory Capacity & Slots	32GB unbuffered ECC/non-ECC DDR3 1600/1333/1066 SDRAM in 4 DIMMs	64GB ECC Registered DDR2 800/667/533 SDRAM in 8 DIMMs	256GB ECC Registered or 64GB unbuffered ECC/non-ECC DDR3 1600/1333/1066 SDRAM in 8 DIMMs	128GB ECC Registered or 32GB unbuffered ECC/non-ECC DDR3 1600/1333/1066 SDRAM in 4 DIMMs	8GB ECC/non-ECC Unbuffered DDR2 800/667/533 SDRAM in 4 DIMMs
Expansion Slots	H8SML-7(F): 1 PCI-E 2.0 x8 (using x16 slot) 1 PCI-E 2.0 x4 (using x8 slot) H8SMi-2(F): 1 PCI-E 2.0 x8 (using x16 slot) 1 PCI-E 2.0 x4 (using x8 slot) 1 PCI-E 2.0 x8	2 PCI-E x16 1 PCI-E x8 (using x16 slot) 2 PCI-E x4 (using x8 slots) 1 32-bit PCI 1 SIMLP slot	1 PCI-E 2.0 x8 (using x16 slot) 1 PCI-E 2.0 x8 1 PCI-E x4 (using x8 slot) 3 32-bit PCI	1 PCI-E 2.0 x8 (using x16 slot) 1 PCI-E 2.0 x8 1 PCI-E x4 (using x8 slot) 3 32-bit PCI	1 PCI-E x16 1 PCI-E x8 (using x16 slot) 1 PCI-E x4 (using x8 slot) 3 32-bit PCI 1 SIMLP slot (H8SMi-2 only)
Onboard SAS/SCSI/SATA/RAID	LSI 2308 SAS2 Controller for 8 SAS2 ports, SW RAID 0, 1, 5, 10 (H8SML-7(F) only) 6 SATA2 ports, RAID 0, 1, 10	LSI 1068E SAS Controller (H8DA3-2 only) NVIDIA MCP55-Pro for 6 SATA2 ports, RAID 0, 1, 0+1, 5, JBOD	6 SATA2 ports, RAID 0, 1, 10	6 SATA2 ports, RAID 0, 1, 10	NVIDIA MCP55-Pro for 6 SATA2 ports, RAID 0, 1, 0+1, 5, JBOD
RAID Support	N/A	AOC-iButton68 (H8DA3-2 only)	N/A	N/A	N/A
Onboard LAN	Dual LAN with two Intel® 82574L Gigabit Ethernet	Dual LAN with NVIDIA MCP55-Pro Gigabit Ethernet	Dual LAN with two Intel® 82574L Gigabit Ethernet	Dual LAN with two Intel® 82574L Gigabit Ethernet	Dual LAN with NVIDIA MCP55-Pro Gigabit Ethernet
Onboard VGA	Matrox G200eW graphics	N/A	Matrox G200eW graphics	Matrox G200eW graphics	ATI ES1000 16MB PCI graphics controller (H8SMi-2 only)
Build-in EIDE/USB Ports	Up to 7 USB 2.0 ports	Single ATA133/100 Up to 8 USB 2.0 ports	Single ATA133/100 Up to 8 USB 2.0 ports	Single ATA133/100 Up to 7 USB 2.0 ports	Single ATA133/100 Up to 8 USB 2.0 ports (H8SMA-2 only)
Other Onboard I/O Devices	1 SATA DOM power connector TPM header 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn.	1 DOM power connector 1 floppy port 1 ECP/EPP parallel port 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn. ALC883 audio CODEC high def 7.1-channel sound Front-side audio header	1 SATA DOM power connector TPM header 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn.	1 SATA DOM power connector TPM header 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn.	1 DOM power connector 1 floppy port 1 ECP/EPP parallel port 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn.
Manageability	IPMI 2.0 + KVM with dedicated LAN (-F versions), Watch Dog, SuperDoctor III	SIMLP(+) (IPMI 2.0) with virtual media option, Watch Dog, SuperDoctor III	IPMI 2.0 + KVM with dedicated LAN (-F version), Watch Dog, SuperDoctor III	IPMI 2.0 + KVM with dedicated LAN (-F version), Watch Dog, SuperDoctor III	IPMI 2.0, Watch Dog, SuperDoctor III
PC Health Monitoring	Monitors CPU core voltages, +3.3V, +5V, +12V, +3.3V standby, and total of 6-fan status, supports system management utility, chassis intrusion header	Monitors CPU core voltages, 3.3V, +5V, +12V, 5V standby, VBAT, and total of 8-fan status, supports system management utility, chassis intrusion header	Monitors CPU core voltages, 1.8V, 3.3V, +5V, +12V, +3.3V standby, VBAT and total of 6-fan status, supports system management utility, chassis intrusion header	Monitors CPU core voltages, 1.8V, 3.3V, +5V, +12V, +3.3V standby, VBAT and total of 5-fan status, supports system management utility, chassis intrusion header	Monitors CPU core voltages, CPU 4-phase-switching voltage regulator, 3.3V, +5V, +12V, 5V standby, and total of 5-fan status, supports system management utility, chassis intrusion header
Thermal Control	Fan speed control & overheat LED indication	PWM Fan speed control & overheat LED indication	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication
Other Features	ACPI power management, WOL, control of power-on mode for recovery from AC power loss & S3 STR support	ACPI power management, internal/external modem ring-on, WOL, control of power-on mode for recovery from AC power loss & S3 STR support	ACPI power management, WOL, control of power-on mode for recovery from AC power loss & S3 STR support	ACPI power management, WOL, control of power-on mode for recovery from AC power loss & S3 STR support	ACPI power management, internal/external modem ring-on, WOL, control of power-on mode for recovery from AC power loss & S3 STR support (H8SMA-2 only)
BIOS	AMI 16 Mb SPI Flash ROM	AMI 8 Mb Flash ROM	AMI 16 Mb SPI Flash ROM	AMI 16 Mb SPI Flash ROM	AMI 4 Mb Flash ROM

\*\* Please refer to page 11 for extra components needed.

## Optimized Chassis and Accessories



### SC733T/TQ

- 4 hot-swap SATA drive bays
- 2 expansion 5.25" bays
- 665W low noise power supply
- Low noise PWM cooling fans
- Mid Tower 16.8" x 7" x 20.9"



### SC743 Series

- 8 hot-swap drive bays
- 7 Tool-less expansion slots
- 90-degree rotatable drive bay module
- 1200W **Platinum Level** low noise power supply
- Hot-swap redundant PWM cooling fans
- 4U/Tower x 25.5"

MB Chassis	H8SML-7/i(F)	H8DA3-2 H8DAi-2	H8SGL(-F)	H8SCM(-F)	H8SMA-2 H8SMi-2
SC813TQ Series	SC813MTQ-R400CB (SAS/SATA) • 4 hot swap drive bay(s) • 400W Redundant Power Supply • IU Riser Card : RSC-RR1U-E8 IU Passive HeatSink: SNK-P0026				
SC813MTQ Series	SC813MT-350CB (SATA) • 4 hot swap drive bay(s) • 1U 350W Power Supply • IU Riser Card : RSC-RR1U-E8 IU Passive HeatSink SNK-P0026				
SC733 Series					SC733TQ/SC733T-500B (SATA) SC733i-500B (Internal) • Low Noise and Cost-Effective • 4 hot-swap SATA drive bays • Low noise 645W/450W
SC512 Series	SC512F-350B (SATA) • Cost-Effective Mini IU • 350W high-efficiency power IU Passive heatsink*: SNK-P0026		SC512F-350B (SATA) • Cost-Effective Mini IU • 350W high-efficiency power IU Passive heatsink*: SNK-P0042P	SC512F-350B (SATA) • Cost-Effective Mini IU • 350W high-efficiency power IU Passive heatsink*: SNK-P0022+	
SC743 Series		SC743T-665B (SAS/SATA) SC743TQ-865B (SAS/SATA) • 8 hot-swap/internal drive bays • Low-noise PWM cooling fan • 665W/865W power supply Active heatsink*: SNK-P0024AP4			

Note: Please refer to website for the most updated compatible chassis revision

\* Sold separately

**Opteron™ 6300**  
**CPU Ready**

**Opteron™ 6300**  
**CPU Ready**



MODEL	H8SMU	H8SSL-i2	H8DGT-HLF/ H8DGT-HLIBQF	H8DCT-HLN4F/ H8DCT-HIBQF	H8DGT-HF/ H8DGT-HIBQF
Processor	Quad-Core AMD Opteron™ 1000 Series Processors	Quad-Core AMD Opteron™ 1000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	8/6/4-Core AMD Opteron™ 4000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors
Chipset/System Bus	NVIDIA MCP55-Pro	ServerWorks HT1000	AMD SR5690/SP5100	AMD SR5690/SP5100 (H8DCT-HIBQF) AMD SR5670/SP5100 (H8DCT-HLN4F)	AMD SR5670/SP5100
Form Factor	Proprietary 7.89" x 13.05"	ATX 12" x 8"	Proprietary 6.8" x 16.64"	Proprietary 6.8" x 16.64"	Proprietary 6.8" x 16.64"
Optimized Chassis	Mini-IU: SC515-280UB** 1U: SC11LT-330UB/360UB** SC11T-560UB** SC815TQ-R700UB** SC812L-520U** SC812L-280U**	IU: SC512F-260 SC811T-300 Mid-Tower: SC733TQ/Ti-665 SC732D2-865B SC732i-500B	2U: SC827H-R1400B** SC827H-R1620B** SC827HD-R1400B SC217HQ-R1620B	2U: SC827H-R1400B** SC827H-R1620B** SC827HD-R1400B SC217HQ-R1600B	2U: SC827H-R1400B** SC827H-R1620B** SC827HD-R1400B SC217HQ-R1600B
Memory Capacity & Slots	8GB ECC/non-ECC Unbuffered DDR2 800/667/533 SDRAM in 4 DIMMs	8GB ECC/non-ECC Unbuffered DDR2 800/667/533 SDRAM in 4 DIMMs	256GB ECC Registered or 64GB unbuffered ECC/non-ECC DDR3 1866/1600/1333/1066 SDRAM in 8 DIMMs	192GB ECC Registered or 64GB unbuffered ECC/non-ECC DDR3 1600/1333/1066 SDRAM in 12 DIMMs	512GB ECC Registered or 128GB unbuffered ECC/non-ECC DDR3 1600/1333/1066 SDRAM in 16 DIMMs
Expansion Slots	IU Left Slot: 1 PCI-E x8 and UIO IU Right Slot: 1 PCI-E x8 SIMSO socket	1 64-bit PCI-X 133MHz 2 32-bit PCI 1U/LP IPMI slot	1 PCI-E 2.0 x16 1 PCI-E 2.0 x8 (using x4 slot) for SAS daughter board support	1 PCI-E 2.0 x16 for PCI-E riser card expansion 1 PCI-E 2.0 x8 (using x4 slot) for SAS daughter board support	1 PCI-E 2.0 x16
Onboard SAS/SCSI/SATA/RAID	NVIDIA MCP55-Pro for 4 SATA2 ports, RAID 0, 1, 0+1, 5, JBOD	ServerWorks HT1000 for 4 SATA ports	6 SATA2 ports, RAID 0, 1, 10 (via daughter board)	6 SATA2 ports, RAID 0, 1, 10 (via daughter board)	6 SATA2 ports, RAID 0, 1, 10 (via daughter board)
RAID Support	N/A	N/A	N/A	N/A	N/A
Onboard LAN	Dual LAN with NVIDIA MCP55-Pro Gigabit Ethernet	Dual LAN with Broadcom 5704 Gigabit Ethernet	Dual LAN with Intel® 82576 Gigabit Ethernet	H8DCT-HLN4F: Quad LAN with Intel® i350 Gigabit Ethernet H8DCT-HIBQF: Dual LAN with Intel® i350 Gigabit Ethernet	Dual LAN with Intel® 82576 Gigabit Ethernet
Onboard VGA	ATI ES1000 16MB PCI graphics controller	ATI ES1000 16MB PCI graphics controller	Matrox G200eW graphics	Matrox G200eW graphics	Matrox G200eW graphics
Build-in EIDE/USB Ports	Single ATA133/100 Up to 4 USB 2.0 ports	Single ATA100 Up to 6 USB 2.0 ports	Up to 5 USB 2.0 ports	Up to 4 USB 2.0 ports	Up to 5 USB 2.0 ports
Other Onboard I/O Devices	1 DOM power connector 1 floppy port 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn.	1 floppy port 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn.	2 fast UART 16550 serial ports TPM header H8DGT-HLIBQF: Mellanox Connect-X2 QDR 40Gbps InfiniBand	1 fast UART 16550 serial ports TPM header H8DCT-HIBQF: Mellanox Connect-X2 IB with QSFP connector InfiniBand	2 fast UART 16550 serial ports TPM header Mellanox Connect-X2 40Gbps InfiniBand (H8DGT-HIBQF only)
Manageability	SIMSO(+) (IPMI 2.0) with KVM and virtual media option, Watch Dog, SuperDoctor III	IPMI 2.0, Watch Dog, SuperDoctor III	IPMI 2.0 + KVM with dedicated LAN, Watch Dog, SuperDoctor III	IPMI 2.0 + KVM with dedicated LAN, Watch Dog, SuperDoctor III	IPMI 2.0 + KVM with dedicated LAN, Watch Dog, SuperDoctor III
PC Health Monitoring	Monitors CPU core voltages, 3.3V, +5V, +12V, 5V standby, VBAT, and total of 5-fan status, supports system management utility, chassis intrusion header	Monitors CPU core voltages, +5V, +12V, 5.5V standby, 2.5V standby, VBAT, and total of 5-fan status, supports system management utility, chassis intrusion header	Monitors CPU core voltages, +1.8V, +3.3V, +5V, +12V, 3.3V standby, VBAT, HyperTransport™ technology voltage 1.2V, memory voltage, and total of 4-fan status, supports system management utility	Monitors CPU core voltages, +1.8V, +3.3V, +5V, +12V, 3.3V standby, VBAT, HyperTransport™ technology voltage 1.2V, memory voltage, and total of 4-fan status, supports system management utility	Monitors CPU core voltages, 1.8V, 3.3V, +5V, +12V, -12V, 1.5V, VBAT, HyperTransport™ technology voltage 1.2V, memory voltage, and total of 4-fan status, supports system management utility
Thermal Control	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication	Fan speed control or PWM fan speed control & overheat LED indication	Fan speed control or PWM fan speed control & overheat LED indication	Fan speed control or PWM fan speed control & overheat LED indication
Other Features	ACPI power management, internal/external modem ring-on, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, internal/external modem ring-on, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, internal/external modem ring-on, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, internal/external modem ring-on, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, internal/external modem ring-on, WOL, control of power-on mode for recovery from AC power loss
BIOS	AMI 4 Mb Flash ROM	AMI 4 Mb Flash ROM	AMI 16 Mb SPI Flash ROM	AMI 16 Mb SPI Flash ROM	AMI 16 Mb SPI Flash ROM

\*\* Please refer to page 13 for extra components needed.

## Optimized Chassis and Accessories



### SC113 Series

- 8 hot-swap 2.5" drive bays
- High density slim 1U rackmount
- 560W/700W power supply with I'C mgt.
- **Platinum Level** 600W redundant digital switching power supply available
- 600W digital switching power supply
- 1U x 23.5"



### SC815 Series

- 4 hot-swap drive bays
- High density slim 1U rackmount
- 560W power supply with I'C mgt.
- **Gold Level** 720W redundant power supplies available
- 600W **Platinum Level** digital switching power supply
- 1U x 25.6"



### SC515-280UB

- High efficiency & cost effective
- 1x 3.5" or 2x 2.5" internal drive bays
- Front I/O ports with UIO expansion
- 280W high-efficiency power supply
- Mini-IU 18" depth



### SC827H-R1620B/R1400B

- Optimized 2U Twin<sup>2</sup> chassis
- High Density four nodes in 2U space
- Up to 3 hot-swap 3.5" HDD per node
- Independent power control
- Redundant 1620W/1400W **Gold Level** high efficiency power
- 2U x 28.5" (OEM only)



### SC217HQ-R1620B/R1400B

- Optimized 2U Twin<sup>2</sup> chassis
- High Density four nodes in 2U space
- Up to 6 hot-swap 2.5" HDD per node
- Independent power control
- Redundant 1620W/1400W **Gold Level** high efficiency power
- 2U x 28.5" (OEM only)



### SC812L Series

- 3 internal drive bays
- Cost-effective Design
- High density 1U rackmount
- 600/520/350/280W high-efficiency power supply
- 1U x 25.6"

MB Chassis	H8SMU	H8SSL-i2	H8DGT-HF H8DGT-HIBQF	H8DGT-HLF H8DGT-HLIBQF	H8DCT-HLN4F H8DCT-HIBQF
SC827 Series			SC827H-R1400B/R1620B • 2U Twin <sup>2</sup> /2U Twin Chassis • 12 hot-swap 3.5" drive bays • 1400W/1620W redundant High Efficiency power w/ I'C Passive heatsink*: SNK-P0042P Hot-swap AOC: BPN-ADP-4SATA-H8 Air shroud: MCP-310-82711-0B	SC827H-R1400B/R1620B • 2U Twin <sup>2</sup> /2U Twin Chassis • 12 hot-swap 3.5" drive bays • 1400W/1620W redundant High Efficiency power w/ I'C Passive heatsink*: SNK-P0037P Hot-swap AOC: BPN-ADP-4SATA-H8 Air shroud: TBD	SC827H-R1400B/R1620B • 2U Twin <sup>2</sup> /2U Twin Chassis • 12 hot-swap 3.5" drive bays • 1400W/1620W redundant High Efficiency power w/ I'C Passive heatsink*: SNK-P0037P Hot-swap AOC: BPN-ADP-4SATA-H8 Air shroud: MCP-310-82711-0B
SC217 Series			SC217HQ-R1400B/R1620B (SATA) • 2U Twin <sup>2</sup> Chassis • 24 hot-swap 2.5" drive bays • 1400W/1620W redundant High Efficiency power w/ I'C Passive heatsink*: SNK-P0042P Hot-swap AOC: BPN-ADP-6SATA-H8 Air shroud: MCP-310-82711-0B	SC217HQ-R1400B/R1620B (SATA) • 2U Twin <sup>2</sup> Chassis • 24 hot-swap 2.5" drive bays • 1400W/1620W redundant High Efficiency power w/ I'C Passive heatsink*: SNK-P0037P Hot-swap AOC: BPN-827ADP-X8-H+ Air shroud: TBD	SC217HQ-R1400B/R1620B (SATA) • 2U Twin <sup>2</sup> Chassis • 24 hot-swap 2.5" drive bays • 1400W/1620W redundant High Efficiency power w/ I'C Passive heatsink*: SNK-P0037P Hot-swap AOC: BPN-827ADP-X8-H+ Air shroud: MCP-310-82711-0B
SC815TQ Series	SC815TQ-R450UB/R700UB/563UB • 4 hot-swap drive bays • 450W&650W Redundant/563W with I'C mgt. IU Passive heatsink*: SNK-P0026 IU Riser cards*: RSC-RIUU-UE8, RSC-RIUU-E8R+ Air shroud*: MCP-310-00033-01	SC815TQ-R450UB/R700UB/563UB • 4 hot-swap drive bays • 450W&650W Redundant/563W with I'C mgt. IU Passive heatsink*: SNK-P0026 IU Riser cards*: RSC-RIUU-UE8 or RSC-RIUU-E8R+ Air shroud*: MCP-310-00033-01	SC812L-280UB/350UB/520UB/ 600UB • 3 internal drive bays • 280/350/520/600W high-efficiency power IU Passive heatsink*: SNK-P0026 IU Riser cards*: RSC-RIUU-UE8 (left slot), RSC-RIUU-E8R+ (right slot) Air shroud*: MCP-310-81202-0B	SC812L-280UB/350UB/520UB/ 600UB • 8 hot-swap 2.5" drive bays • Redundant 650W/563W with I'C mgt. IU Passive heatsink*: SNK-P0026 IU Riser card*: RSC-RIUU-UE8, RSC-RIUU-E8R+ Air shroud*: MCP-310-00033-01	SC812L-280UB/350UB/520UB/ 600UB • 8 hot-swap 2.5" drive bays • Redundant 650W/563W with I'C mgt. IU Passive heatsink*: SNK-P0026 IU Riser card*: RSC-RIUU-UE8, RSC-RIUU-E8R+ Air shroud*: MCP-310-00033-01
SC812L Series	SC812L-280UB/350UB/520UB/ 600UB • 3 internal drive bays • 280/350/520/600W high-efficiency power IU Passive heatsink*: SNK-P0026 IU Riser cards*: RSC-RIUU-UE8 (left slot), RSC-RIUU-E8R+ (right slot) Air shroud*: MCP-310-81202-0B	SC812L-280UB/350UB/520UB/ 600UB • 8 hot-swap 2.5" drive bays • Redundant 650W/563W with I'C mgt. IU Passive heatsink*: SNK-P0026 IU Riser card*: RSC-RIUU-UE8, RSC-RIUU-E8R+ Air shroud*: MCP-310-00033-01	SC113TQ-R650UB/563UB • 8 hot-swap 2.5" drive bays • Redundant 650W/563W with I'C mgt. IU Passive heatsink*: SNK-P0026 IU Riser card*: RSC-RIUU-UE8, RSC-RIUU-E8R+ Air shroud*: MCP-310-00033-01	SC113TQ-R650UB/563UB • 8 hot-swap 2.5" drive bays • Redundant 650W/563W with I'C mgt. IU Passive heatsink*: SNK-P0026 IU Riser card*: RSC-RIUU-UE8, RSC-RIUU-E8R+ Air shroud*: MCP-310-00033-01	SC113TQ-R650UB/563UB • 8 hot-swap 2.5" drive bays • Redundant 650W/563W with I'C mgt. IU Passive heatsink*: SNK-P0026 IU Riser card*: RSC-RIUU-UE8, RSC-RIUU-E8R+ Air shroud*: MCP-310-00033-01
SC733 Series			SC733TQ/SC733T-645B(SATA) SC733T-450B (SATA) SC733i-450/645B (Internal) • Low Noise and Cost-Effective • 4 hot-swap SATA drive bays • Low noise 645W/450W		
SC512 Series			SC512F-260 Mini IU and Cost Effective • 1 internal 3.5" SATA • 260W power supply IU Passive heatsink*: SNK-P0012 IU Riser cards*: CSE-RR1U-X Rail kits*: CSE-PT8 Air shroud*: CSE-PT0112		
SC515 Series	SC515-280UB • Cost-Effective Mini IU • 280W high-efficiency power IU Passive heatsink*: SNK-P0026 IU Riser cards*: RSC-RIUU-UE8 Air shroud*: MCP-310-51501-0B				

Note: Please refer to website for the most updated compatible chassis revision

**Opteron™ 6300**  
**CPU Ready**



MODEL	H8DCT-F/ H8DCT-IBQF	H8DGG-QF	H8DMT-INF+/ H8DMT+	H8DMT-IBX(F)/ H8DMT-(F)	H8DA8/ H8DAE
Processor	8/6/4-Core AMD Opteron™ 4000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	6-Core AMD Opteron™ 2000 Series Processors	6-Core AMD Opteron™ 2000 Series Processors	Dual-Core AMD Opteron™ 200 Series Processors
Chipset/System Bus	AMD SR5670/SP5100	Dual AMD SR5690/SP5100	NVIDIA MCP55V-Pro	NVIDIA MCP55-Pro	AMD 8131 PCI-X Tunnel AMD 8111 I/O Hub
Form Factor	Proprietary 6.5" x 16.64"	Proprietary 7.74" x 16.64"	Proprietary 6.8" x 16.64"	Proprietary 6.5" x 16.4"	EATX 12" x 13.05"
Optimized Chassis	1U: SC808T-780B** SC809TQ-780B** 2U: SC827H-R1400B** SC827H-R1620B**	1U: SC818G-1400** SC818G-R1400	1U: SC808T-980B** SC809T-980B**	1U: SC808T-780B** SC809T-780B**	<b>H8DA8:</b> 2U: SC823S-R500LPB/550LPB 3U: SC933S1-R760B/SC933S2-R760B  <b>H8DAE:</b> 2U: SC823i-550LPB** SC822i-400LPB** 4U: SC743i-R760B
Memory Capacity & Slots	192GB ECC Registered or 64GB unbuffered ECC/non-ECC DDR3 1600/1333/1066 SDRAM in 12 DIMMs	512GB ECC Registered or 128GB unbuffered ECC/non-ECC DDR3 1600/1333/1066 SDRAM in 16 DIMMs*	128GB ECC Registered DDR2 800/667/533 SDRAM in 16 DIMMs*	64GB ECC Registered DDR2 800/667/533 SDRAM in 8 DIMMs	16/32/32GB ECC Registered DDR 400/333/266 SDRAM in 8 DIMMs
Expansion Slots	1 PCI-E 2.0 x16	3 PCI-E 2.0 x16 2 PCI-E 2.0 x8 (using x16 slot)	1 PCI-E x16 SIMSO socket	1 PCI-E x16	2 64-bit PCI-X 133/100 MHz 2 64-bit PCI-X 66 MHz 2 32-bit PCI LP IPMI slot
Onboard SAS/SCSI/SATA/RAID	4 SATA2 ports, RAID 0, 1, 10	6 SATA2 ports, RAID 0, 1, 10	NVIDIA MCP55V-Pro for 4 SATA2 ports, RAID 0, 1, 0+1, 5, JBOD	NVIDIA MCP55V-Pro for 4 SATA2 ports, RAID 0, 1, 0+1, 5, JBOD	Adaptec 7902W dual-channel Ultra320 SCSI with host RAID (H8DA8 only)
RAID Support	N/A	N/A	N/A	N/A	AOC-LPZCR1 or AOC-LPZCR2 (H8DA8 only)
Onboard LAN	Dual LAN with Intel® 82576 Gigabit Ethernet	Dual LAN with Intel® 82576 Gigabit Ethernet	Dual LAN with NVIDIA MCP55V-Pro Gigabit Ethernet	Intel® 82575 Dual-port GbE controller w/ VMDq support	Dual LAN with Broadcom 5704 Gigabit Ethernet
Onboard VGA	Matrox G200eW graphics	Matrox G200eW graphics	XGI Z9S 32MB graphics controller	Matrox G200eW graphics	ATI Rage XL 8MB PCI graphics controller
Build-in EIDE/USB Ports	Up to 4 USB 2.0 ports	Up to 4 USB 2.0 ports	Up to 6 USB 2.0 ports	Up to 6 USB 2.0 ports	Dual ATA133/100 Up to 5 USB 1.1 ports
Other Onboard I/O Devices	2 fast UART 16550 serial ports TPM header Mellanox Connect-X2 40Gbps InfiniBand (H8DCT-IBQF only)	2 fast UART 16550 serial ports TPM header	2 fast UART 16550 serial ports Mellanox InfiniHost III MT25204 20Gbps InfiniBand (H8DMT-INF+ only)	2 fast UART 16550 serial ports Mellanox Connect-X MT25408A0-FCC-DI 20Gbps InfiniBand (H8DMT-IBX(F) only)	1 floppy port 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn.
Manageability	IPMI 2.0 + KVM with dedicated LAN, Watch Dog, SuperDoctor III	IPMI 2.0 + KVM with dedicated LAN, Watch Dog, SuperDoctor III	SIMSO(+) IPMI 2.0 (H8DMT-INF+/H8DMT+ only), KVM and VM options, Watch Dog, SuperDoctor III	IPMI 2.0 + KVM with dedicated LAN (F version only), Watch Dog, SuperDoctor III	IPMI 2.0, Watch Dog, SuperDoctor III
PC Health Monitoring	Monitors CPU core voltages, 3.3V, +5V, +12V, -12V, 1.5V, VBAT, HyperTransport™ technology voltage 1.2V, memory voltage, and total of 4-fan status, supports system management utility	Monitors CPU core voltages, 1.8V, 3.3V, +5V, +12V, -12V, 1.5V, 3.3V standby, VBAT, HyperTransport™ technology voltage 1.2V, memory voltage 1.8V, and total of 4-fan status, supports system management utility, chassis intrusion header	Monitors CPU core voltages, 3.3V, +5V, +12V, -12V, 5V standby, 1.5V, VBAT, HyperTransport™ technology voltage 1.2V, memory voltage 1.8V, and total of 8-fan or 4-fan status, supports system management utility, chassis intrusion header	Monitors CPU core voltages, 3.3V, +5V, +12V, -12V, 3.3V standby, HyperTransport™ technology voltage 1.2V, memory voltage 1.8V, 2.5V, DDR termination 1.25V, chipset voltage 1.8V, and total of 8-fan status, supports system management utility, chassis intrusion header	Monitors CPU core voltages, 3.3V, +5V, +12V, -12V, 3.3V standby, HyperTransport™ technology voltage 1.2V, memory voltage 1.8V, 2.5V, DDR termination 1.25V, chipset voltage 1.8V, and total of 8-fan status, supports system management utility, chassis intrusion header
Thermal Control	Fan speed control or PWM fan speed control & overheat LED indication	PWM Fan speed control & overheat LED indication	Fan speed control or PWM fan speed control & overheat LED indication	Fan speed control or PWM fan speed control & overheat LED indication	Fan speed control & overheat LED indication
Other Features	ACPI power management, internal/external modem ring-on, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, internal/external modem ring-on, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, internal/external modem ring-on, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, internal/external modem ring-on, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, internal/external modem ring-on, WOL, control of power-on mode for recovery from AC power loss
BIOS	AMI 16 Mb SPI Flash ROM	AMI 16 Mb SPI Flash ROM	AMI 8 Mb Flash ROM	AMI 8 Mb SPI Flash ROM	AMI 4 Mb Flash ROM

\* Fully populated DDR2 800/667 memory will be downgraded to DDR2 533

\*\* Please refer to page 15 for extra components needed.

## Optimized Chassis and Accessories



### **SC818G-1400B**

- Optimized for GPU, supports up to 2 GPU cards
- 3 hot-swap drive bays
- Gold Level 1400W power supply
- 8 high performance counter rotating fans
- 1U x 28.2"

### **SC808T-1200B/780B**

- Optimized IU Twin™ chassis
- High Density two nodes in 1U space
- 3.5" HDD support
- Independent power control
- 980W/780W high efficiency power with I<sup>2</sup>C mgt.
- 1U x 27.75"



### **SC743S1-R760B**

- 8 hot-swap SCA drive bays
- 90-degree rotatable drive bay module
- Triple 760W redundant power
- 4U x 25.5"/Tower



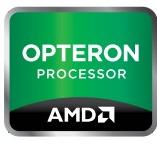
### **SC809T-1200B/780B**

- Optimized IU Twin™ chassis
- High Density two nodes in 1U space
- Power Efficient 2.5" HDD support
- Independent power control
- 980W/780W high efficiency power with I<sup>2</sup>C mgt.
- 1U x 27.75"

MB Chassis	H8DCT-F H8DCT-IBQF	H8DGG-QF	H8DMT-INF+ H8DMT+	H8DMT-IBX(F) H8DMT-(F)	H8DA8 H8DAE
<b>SC808 Series</b>	SC808T-1200B/780B (SATA) • 1U Twin™ Chassis • 4 hot-swap 3.5" drive bays • 1200W/780W High Efficiency power w/ I <sup>2</sup> C Passive heatsink*: SNK-P0022+ Air shroud*: MCP-310-18008-0N Riser card*: RSC-R1U-E16R		SC808T-980B (SATA) • 1U Twin™ Chassis • 4 hot-swap 3.5" drive bays • 980W High Efficiency power w/ I <sup>2</sup> C Passive heatsink*: SNK-P0022+ Air shroud*: MCP-310-18008-0N Riser card*: RSC-R1U-E16R	SC808T-780B (SATA) • 1U Twin™ Chassis • 4 hot-swap 3.5" drive bays • 780W High Efficiency power w/ I <sup>2</sup> C Passive heatsink*: SNK-P0022+ Air shroud*: MCP-310-18008-0N Riser card*: RSC-R1U-E16R	
<b>SC809 Series</b>	SC809T-1200B/780B (SATA) • 1U Twin™ Chassis • 8 hot-swap 2.5" drive bays • 1200W/780W High Efficiency power w/ I <sup>2</sup> C Passive heatsink*: SNK-P0022+ Air shroud*: MCP-310-80802-0B Riser card*: RSC-R1U-E16R		SC809T-980B (SATA) • 1U Twin™ Chassis • 8 hot-swap 2.5" drive bays • 980W High Efficiency power w/ I <sup>2</sup> C Passive heatsink*: SNK-P0022+ Air shroud*: MCP-310-80802-0B Riser card*: RSC-R1U-E16R	SC809T-780B (SATA) • 1U Twin™ Chassis • 8 hot-swap 2.5" drive bays • 780W High Efficiency power w/ I <sup>2</sup> C Passive heatsink*: SNK-P0022+ Air shroud*: MCP-310-80802-0B Riser card*: RSC-R1U-E16R	
<b>SC743 Series</b>					SC743S1-R760B SC743i-R760B • 100% Cooling and Power Redundancy • 4U/Tower convertible • 8 hot-swap SCA/8 fixed drive bays • Triple 760W redundant cooling Passive heatsink*: SNK-P0023P or SNK-P0013
<b>SC833 Series</b>					SC833S-R760B • 100% Cooling and Power Redundancy • 8 hot-swap SCA drive bays • Triple 760W/650W power supply Passive heatsink*: SNK-P0023P or SNK-P0013
<b>SC823 Series</b>					SC823S-R500LPB SC823i-550LPB SC822i-400LPB • High Performance and Power Redundancy • 6 hot-swap SCA/6 fixed drive bays • Redundant 500W/550W • 7 low-profile expansion slots Passive heatsink*: SNK-P0023P or SNK-P0013 Air shroud*: CSE-PT83
<b>SC818G Series</b>		SC818G-1400B • Optimized for 1U GPU • 3 hot-swap drive bays • Gold Level 1400W power supply Passive heatsink*: SNK-P0042P Riser card*: RSC-R1UG-E16, RSC-R1UG-UR or RSC-R1U-E16R			
<b>SC827 Series</b>	SC827H-R1400B/R1620B • 2U Twin™/2U Twin Chassis • 12 hot-swap 3.5" drive bays • 1400W redundant High Efficiency power w/ I <sup>2</sup> C Passive heatsink*: SNK-P0022+ Hot-swap AOC: BPN-827ADP-X8 Air-shroud: TBA				

Note: Please refer to website for the most updated compatible chassis revision

\* Sold separately



MODEL	H8DCE	H8DC8/ H8DCi	H8DMR-82/ H8DMR-i2	H8DAR-8/ H8DAR-i	H8DAR-T/ H8DAR-E
Processor	Dual-Core AMD Opteron™ 200 Series Processors	Dual-Core AMD Opteron™ 200 Series Processors	6-Core AMD Opteron™ 2000 Series Processors	Dual-Core AMD Opteron™ 200 Series Processors	Dual-Core AMD Opteron™ 200 Series Processors
Chipset/System Bus	NVIDIA nForce Pro 2200 NVIDIA nForce Pro 2050	NVIDIA nForce Pro 2200 NVIDIA nForce Pro 2050 AMD 8132 PCI-X Tunnel	NVIDIA MCP55-Pro NEC 720400 PCI-X Bridge	AMD 8131 PCI-X Tunnel AMD 8111 I/O Hub	AMD 8131 PCI-X Tunnel AMD 8111 I/O Hub
Form Factor	EATX 12" x 13.05"	EATX 12" x 13.05"	EATX 12" x 13.05"	EATX 12" x 13.05"	EATX 12" x 13.05"
Optimized Chassis	4U: SC743T-665B** SC743i-665B Mid-Tower: SC733T-665B** SC732i-865B	H8DC8: 3U: SC833S-R760B/550B** 4U: SC743S2-R760B/650B** H8DCi: 4U: SC743i-R760B/665B** Mid-Tower: SC733i-645B** SC732D2-865B	H8DMR-82: 1U: SC815S+-560B** SC815S-R650B** H8DMR-i2: 1U: SC815TQ+-560B SC815TQ-R650B SC812L-520B	H8DAR-8: 1U: SC813S-500B SC812S-420B/520B** H8DAR-i: 1U: SC812i-420B SC812L-420B/520B	H8DAR-T: 1U: SC813T+-500B** H8DAR-E: 1U: SC813i-500B**
Memory Capacity & Slots	16/32/32GB ECC Registered DDR 400/333/266 SDRAM in 8 DIMMs	16/32/32GB ECC Registered DDR 400/333/266 SDRAM in 8 DIMMs	64GB ECC Registered DDR2 800/667/533 SDRAM in 8 DIMMs	16/32/32GB ECC Registered DDR 400/333/266 SDRAM in 8 DIMMs	16/32/32GB ECC Registered DDR 400/333/266 SDRAM in 8 DIMMs
Expansion Slots	2 PCI-E x16 2 PCI-E x4 (using x8 slot) 3 32-bit PCI	2 PCI-E x16 1 PCI-E x4 (using x8 slot) 2 64-bit PCI-X 133/100 MHz 1 64-bit PCI-X 100 MHz 1 32-bit PCI	1 Universal PCI-X 133 MHz or 1 PCI-E x8 1 Universal PCI-X 100 MHz or 1 PCI-E x8 SIMIU-3B slot	1 64-bit PCI-X 100 MHz 1U IPMI slot	2 64-bit PCI-X 133/100 MHz 1U IPMI slot
Onboard SAS/SCSI/SATA/RAID	NVIDIA nForce Pro 2200 & 2050 SATA (3Gbps) controller for 8 SATA ports NVIDIA RAID 2.0	Adaptec 7902W dual-channel Ultra320 SCSI with host RAID (H8DC8 only) NVIDIA nForce Pro 2200 SATA (3Gbps) controller for 4 SATA ports	Adaptec 7902W dual-channel Ultra320 SCSI with host RAID (H8DMR-82 only) NVIDIA MCP55-Pro for 6 SATA2 ports, RAID 0, 1, 0+1, 5, JBOD	Adaptec 7902W dual-channel Ultra320 SCSI with host RAID (H8DAR-8 only)	Marvell 88SX6041 controller for 4 SATA ports (H8DAR-T only)
RAID Support	N/A	AOC-LPZCR1 or AOC-LPZCR2 (H8DC8 only)	AOC-LPZCR1 or AOC-LPZCR2 (H8DMR-82 only)	AOC-SOZCR1 (H8DAR-8 only)	AOC-LPZCR1 or AOC-LPZCR2 (H8DAR-T only)
Onboard LAN	Dual LAN with NVIDIA nForce Pro 2200 & 2050 Gigabit Ethernet	Dual LAN with NVIDIA nForce Pro 2200 & 2050 Gigabit Ethernet	Dual LAN with NVIDIA MCP55-Pro Gigabit Ethernet	Dual LAN with Broadcom 5704 Gigabit Ethernet	Dual LAN with Broadcom 5704 Gigabit Ethernet
Onboard VGA	N/A	N/A	ATI ES1000 16MB PCI graphics controller	ATI Rage XL 8MB PCI graphics controller	ATI Rage XL 8MB PCI graphics controller
Build-in EIDE/USB Ports	Dual ATA133/100 Up to 8 USB 2.0 ports	Dual ATA133/100 Up to 8 USB 2.0 ports	Single ATA133/100 Up to 4 USB 2.0 ports	Dual ATA133/100 Up to 5 USB 1.1 ports	Dual ATA133/100 Up to 5 USB 1.1 ports
Other Onboard I/O Devices	1 floppy port 1 ECP/EPP parallel port 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn. AC'97 audio CODEC high quality 6-channel sound Front-side audio header	1 floppy port 1 ECP/EPP parallel port 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn. AC'97 audio CODEC high quality 6-channel sound Front-side audio header	1 floppy port 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn.	1 floppy port 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn.	1 floppy port 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn.
Manageability	Watch Dog, SuperDoctor III	Watch Dog, SuperDoctor III	SIMIU-3B(+) (IPMI 2.0) with KVM and virtual media option, Watch Dog, SuperDoctor III	IPMI 2.0, Watch Dog, SuperDoctor III	IPMI 2.0, Watch Dog, SuperDoctor III
PC Health Monitoring	Monitors CPU core voltages, 3.3V, +5V, +12V, -12V, 3.3V standby, HyperTransport™ technology voltage 1.2V, memory voltage 2.5V, NVIDIA nForce Pro 2200 & 2050 voltage 1.5V, and total of 8-fan status, supports system management utility, chassis intrusion header	Monitors CPU core voltages, 3.3V, +5V, +12V, -12V, 3.3V standby, HyperTransport™ technology voltage 1.2V, memory voltage 2.5V, NVIDIA nForce Pro 2200 & 2050 voltage 1.5V, and total of 8-fan status, supports system management utility, chassis intrusion header	Monitors CPU core voltages, CPU 4-phase-switching voltage regulator, 3.3V, +5V, +12V, -12V, 5V standby, 1.5V, VBAT, HyperTransport™ technology voltage 1.2V, memory voltage 1.8V, and total of 5-fan status, supports system management utility, mem VTT, MCP55 Vcore, chassis intrusion header	Monitors CPU core voltages, 3.3V, +5V, +12V, -12V, 3.3V standby, HyperTransport™ technology voltage 1.2V, memory voltage 2.5V, DDR termination 1.25V, chipset voltage 1.8V, and total of 5-fan status, supports system management utility, chassis intrusion header	Monitors CPU core voltages, 3.3V, +5V, +12V, -12V, battery voltage, total of 5-fan status, supports system management utility, chassis intrusion header
Thermal Control	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication
Other Features	ACPI power management, internal/external modem ring-on, WOL, control of power-on mode for recovery from AC power loss & S3 STR support	ACPI power management, internal/external modem ring-on, WOL, control of power-on mode for recovery from AC power loss & S3 STR support	ACPI power management, internal/external modem ring-on, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, internal/external modem ring-on, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, internal/external modem ring-on, WOL, control of power-on mode for recovery from AC power loss
BIOS	AMI 4 Mb Flash ROM	AMI 8 Mb Flash ROM	AMI 8 Mb Flash ROM	AMI 4 Mb Flash ROM	AMI 4 Mb Flash ROM

\*\* Please refer to page 17 for extra components needed.

## Optimized Chassis and Accessories



### SC815 Series

- 4 hot-swap drive bays
- High density slim IU rackmount
- 560W power supply with I<sup>2</sup>C mgt.
- Gold Level 720W redundant power supplies available
- 600W Platinum Level digital switching power supply
- IU x 25.6"



### SC743 Series

- 8 hot-swap drive bays
- 7 Tool-less expansion slots
- 90-degree rotatable drive bay module
- 1200W Platinum Level low noise power supply
- Hot-swap redundant PWM cooling fans
- 4U/Tower x 25.5"



### SC813T+-500

- 4 hot-swap SATA drive bays
- 500W cold-swap power with I<sup>2</sup>C mgt.
- 2 PCI-X slots
- 1 slim CD & 1 slim floppy drive
- 1U x 25.6"



### SC733T-465B/500B/655B

- 4 hot-swap SATA drive bays
- 2 expansion 5.25" bays
- 465W/500W/655W low noise power supply
- Low noise PWM cooling fans
- 16.8" x 7" x 20.9"/Mid Tower

MB Chassis \ H8DCE	H8DC8 H8DCi	H8DMR-82/ H8DMR-i2	H8DAR-8/ H8DAR-i	H8DAR-T/ H8DAR-E
SC815 Series		SC815S(+) -560/R650 (SCSI) SC815TQ (+) -560/R650 (SATA) <ul style="list-style-type: none"> <li>• 4 hot-swap drive bays</li> <li>• 560W power supply</li> <li>• Redundant 700W with I<sup>2</sup>C</li> <li>• IU Passive heatsink*: SNK-P0022</li> <li>• IU Riser cards*: CSE-RRIU-X(LP), CSE-RRIU-EL(P)</li> </ul>		
SC813 Series			SC813S-520L (SCSI) <ul style="list-style-type: none"> <li>• High Performance and Storage</li> <li>• 4 hot-swap SCA</li> <li>• 520W with I<sup>2</sup>C mgt.</li> </ul> IU Passive heatsink*: SNK-P0012 IU Riser cards*: CSE-RRIU-X Air shroud*: CSE-PT82	SC813T+-500 (SATA) SC813i+-500 <ul style="list-style-type: none"> <li>• High Performance and Storage</li> <li>• 4 hot-swap SATA/4 fixed</li> <li>• 500W with I<sup>2</sup>C mgt.</li> </ul> IU Passive heatsink*: SNK-P0012 IU Riser cards*: CSE-RRIU-X; CSE-RRIU-XLP Air shroud*: CSE-PT70
SC812 Series		SC812L-600B <ul style="list-style-type: none"> <li>• 3 internal drive bays</li> <li>• 600W high-efficiency power</li> </ul> IU Passive heatsink*: SNK-P0022 IU Riser cards*: CSE-RRIU-X; CSE-RRIU-XLP; CSE-RRIU-E; CSE-RRIU-ELP	SC812S-420C (SCSI) <ul style="list-style-type: none"> <li>• SC812i-420C</li> <li>• SC812L-520C</li> <li>• Versatile and Cost Effective</li> <li>• 3 hot-swap SCA/3 fixed/3 internal drive bays</li> <li>• 420W power supply</li> </ul> IU Passive heatsink*: SNK-P0012 IU Riser cards*: CSE-RRIU-X Air shroud*: CSE-PT82	
SC743 Series	SC743T-665B (SATA) SC743i-665B <ul style="list-style-type: none"> <li>• Low Noise Workstation</li> <li>• 4U/Tower convertible</li> <li>• 8 hot-swap SATA/8 fixed drive bays</li> <li>• Low noise 665W</li> <li>Active heatsink*: SNK-P0024AP4</li> </ul>			
SC833 Series		SC833S-R760B <ul style="list-style-type: none"> <li>• 100% Cooling and Power Redundancy</li> <li>• 8 hot-swap SCA drive bays</li> <li>• Triple 760W/550W power supply</li> </ul> Passive heatsink*: SNK-P0023P or SNK-P0013		
SC733 Series	SC733i-500B/665B <ul style="list-style-type: none"> <li>• Low Noise and Cost Effective</li> <li>• 4 fixed drive bays</li> <li>• Low noise 500W/665W</li> <li>Active heatsink*: SNK-P0024AP4</li> </ul>			

Note: Please refer to website for the most updated compatible chassis revision

\* Sold separately

**Opteron™ 6300 CPU Ready**   **Opteron™ 6300 CPU Ready**  
**3.5" HDD GPU**   **2.5" HDD GPU**

**IU Twin™**



MODEL	A+ Server 1022GG-TF	A+ Server 1122GG-TF	A+ Server 1022TC-TF/ A+ Server 1022TC-IBQF
Processor Support	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	8/6/4-Core AMD Opteron™ 4000 Series Processors
Key Applications	Specialized HPC cluster nodes, medical imaging, oil and gas simulation, quantum chemistry, financial simulation, astrophysics	Specialized HPC cluster nodes, medical imaging, oil and gas simulation, quantum chemistry, financial simulation, astrophysics	HPC cluster computer nodes, datacenter, data farm, front-end server and other computing intensive applications
Outstanding Features	<ul style="list-style-type: none"> <li>• Supports up to 2 GPU cards</li> <li>• 512GB DDR3 1600/1333/1066 SDRAM</li> <li>• 4 hot-swap 3.5" SATA drive bays</li> <li>• RAID : 0, 1, 10</li> <li>• 2 Gigabit Ethernet ports</li> <li>• IPMI 2.0 management</li> <li>• 1400W Gold Level high-efficiency power supply</li> </ul>	<ul style="list-style-type: none"> <li>• Supports up to 2 GPU cards</li> <li>• 512GB DDR3 1600/1333/1066 SDRAM</li> <li>• 6 hot-swap 2.5" SATA drive bays</li> <li>• RAID : 0, 1, 10</li> <li>• 2 Gigabit Ethernet ports</li> <li>• IPMI 2.0 management</li> <li>• 1400W Gold Level high-efficiency power supply</li> </ul>	<ul style="list-style-type: none"> <li>• Two nodes in 1U</li> <li>• Double density and computing power</li> <li>• Independent power control</li> <li>• Independent cooling control</li> <li>• 2 hot-swap 3.5" SATA drive bays (Per Node)</li> <li>• RAID : 0,1</li> <li>• Higher power utilization increases power supply efficiency</li> <li>• 920W Platinum Level high-efficiency power supply</li> <li>• Reduce power cables and power strips</li> </ul>
Serverboard/Chipset	H8DGG-QF / HyperTransport™ technology Dual AMD SR5690/SP5100	H8DGG-QF / HyperTransport™ technology Dual AMD SR5690/SP5100	H8DCT-F-/IBQF / HyperTransport™ technology AMD SR5670/SP5100
System Memory (Max.)	512GB ECC Registered DDR3 1600/1333/1066 SDRAM in 16 DIMMs	512GB ECC Registered DDR3 1600/1333/1066 SDRAM in 16 DIMMs	Twin set of 192 GB ECC Registered or 64GB unbuffered ECC/non-ECC DDR3 1600/1333/1066 SDRAM in 12 DIMMs
Expansion Slots	2 PCI-E 2.0 x16 1 PCI-E 2.0 x8 (low profile)	2 PCI-E 2.0 x16 1 PCI-E 2.0 x8 (low profile)	Twin set of PCI-E 2.0 x16 via Riser card (low profile)
Onboard SAS/SCSI/SATA/IDE/RAID	AMD SP5100 for 3 SATA	AMD SP5100 for 6 SATA	Twin set of AMD SP5100 for 2 SATA
Connectivity/VGA/Audio	Dual LAN with Intel® 82576 Gigabit Ethernet controller Matrox G200eW graphics controller	Dual LAN with Intel® 82576 Gigabit Ethernet controller Matrox G200eW graphics controller	Twin set of dual LAN with Intel® 82576 Gigabit Ethernet controller Twin set of Mellanox Connect-X 40Gbps InfiniBand (1022TC-IBQF only) Twin set of Matrox G200eW graphics controller
Management	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog
Drive Bays	3 hot-swap 3.5" SATA drive bays with SES2 support	6 hot-swap 2.5" SATA drive bays with SES2 support	Twin set of 2 hot-swap 3.5" SATA drive bays with SES2 support
Peripheral Bays	1 slim DVD-ROM drive (optional)	N/A	N/A
Power Supply	1400W Gold Level high-efficiency power supply	1400W Gold Level high-efficiency power supply	920W Platinum Level high-efficiency power supply with I²C built-in
Cooling System	8x 4cm heavy duty counter-rotating fans with air shroud & optimal fan speed control	8x 4cm heavy duty counter-rotating fans with air shroud & optimal fan speed control	Twin set of 3x 4cm heavy duty counter-rotating fans with air shroud & optimal fan speed control
Form Factor	IU Rackmount 437 x 43 x 716mm (17.2" x 1.7" x 28.2")	IU Rackmount 437 x 43 x 716mm (17.2" x 1.7" x 28.2")	IU Rackmount 437 x 43 x 704mm (17.2" x 1.7" x 27.75")

\* Please check 'Tested Memory List' on Supermicro website for compatibility



A+ Server 1012A-MT(R)F	A+ Server 1012A-M73RF	A+ Server 1012A-MRF	A+ Server 1022G-URF/ A+ Server 1022G-NTF
8/4-Core AMD Opteron™ 3000 series processors  High-end enterprise server, SQL server High performance computer cluster (HPCC)  • 4 hot-swap 3.5" SATA drive bays • RAID 0,1,10 • 1 PCI-E 2.0 x8 • 32GB of DDR3 Unb. ECC memory • 2 Intel 82574L single-port Gigabit Ethernet, 10/100/1000Base-T support • 350W high-efficiency Redundant power supply (For 1012A-MTRF only)	8/4-Core AMD Opteron™ 3000 series processors  High-end enterprise server, SQL server, High performance computer cluster (HPCC), Web server for small business, server appliance, cluster node  • 4 hot-swap 3.5" SATA /SAS drive bays • RAID: 0, 1, 10 • 1 PCI-E 2.0 x8 • 32GB of DDR3 Unb. ECC memory • 2 Intel 82574L single-port Gigabit Ethernet, 10/100/1000Base-T support • 400W high-efficiency redundant power supply	8/4-Core AMD Opteron™ 3000 series processors  High-end enterprise server, SQL server, High performance computer cluster (HPCC)  • 2 SATA internal drive bays • RAID: 0, 1 • 1 PCI-E 2.0 x8 • 32GB of DDR3 Unb. ECC memory • 2 Intel 82574L single-port Gigabit Ethernet, 10/100/1000Base-T support • 200W high-efficiency power supply • 1U Rackmount (14" depth optimized space efficiency)	16/12/8/4-Core AMD Opteron™ 6000 Series Processors  High-end enterprise server, SQL server, High performance computer cluster (HPCC)  • 4 hot-swap 3.5" SATA drive bays (1022G-NTF) • 4 hot-swap 3.5" SATA/SAS drive bays (1022G-URF <addition UIO SAS card required>) • RAID: 0, 1, 10 (1022G-NTF) • Universal I/O slot (1022G-URF) and PCI-E slot • 512GB DDR3 1600/1333/1066 SDRAM • 2 Gigabit Ethernet ports • IPMI 2.0 management • 700W Gold Level high-efficiency redundant power supplies (1022G-URF only) • 560W high-efficiency power supply (1022G-NTF)
H8ML-iF AMD SR5650 / SP5100	H8ML-7F AMD SR5650 / SP5100 + LSI 2308	H8ML-iF AMD SR5650 / SP5100	H8DGU-F / HyperTransport™ technology AMD SR5670/SP5100
32GB unbuffered DDR3 ECC 1600/1333/1066 in 4 DIMMs	32GB unbuffered DDR3 ECC 1600/1333/1066 in 4 DIMMs	32GB unbuffered DDR3 ECC 1600/1333/1066 in 4 DIMMs	512GB ECC Registered DDR3 1600/1333/1066 SDRAM in 16 DIMMs
1 PCI-E x8	1 PCI-E x8	1 PCI-E x8	1 Universal I/O (UIO) slot (1022G-URF only) 1 PCI-E 2.0 x16 (1022G-URF only) 2 PCI-E 2.0 x8 (1022G-NTF only)
AMD SR5650 / SP5100 for 4 SATA	LSI 2308 SAS Controller for 4 SAS /SATA	AMD SR5650 / SP5100 for 2 SATA	UIO SAS 4 port controller* AMD SP5100 for 4 SATA
Dual LAN with Intel® 82574L Gigabit Ethernet controller Matrox G200eW graphics controller	Dual LAN with Intel® 82574L Gigabit Ethernet controller Matrox G200eW graphics controller	Dual LAN with Intel® 82574L Gigabit Ethernet controller Matrox G200eW graphics controller	Dual LAN with Intel® 82576 Gigabit Ethernet controller Matrox G200eW graphics controller
IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog
4 hot-swap 3.5" SATA drive bays	4 hot-swap 3.5" SATA /SAS drive bays	2 internal 3.5" drive SATA bays	4 hot-swap 3.5" SAS or SATA drive bays with SES2 support
N/A	N/A	N/A	1 slim DVD-ROM drive
350W Gold Level efficiency power supply	400W redundant SuperCompact Short-depth AC-DC high-efficiency power supply	200W Gold Level efficiency power supply	700W Gold Level high-efficiency redundant power supplies (1022G-URF only) 560W Gold Level high-efficiency power supply (1022G-NTF only)
4x 4cm heavy duty counter-rotating fans	4x 4cm heavy duty counter-rotating fans	1 x 10 cm heavy duty counter-rotating fans	4x 4cm heavy duty counter-rotating fans with air shroud & optimal fan speed control
1U Rackmount 437 x 503 x 43 mm (17.2" x 19.8" x 1.7")	1 U Rackmount 437 x 503 x 43mm (17.2" x 19.85" x 1.7" )	1U Rackmount (14" Depth) 426 x 345 x 43mm (16.8" x 14" x 1.7")	1U Rackmount 437 x 43 x 650mm (17.2" x 1.7" x 25.6")

\* Supermicro UIO card must be installed

*Opteron™ 6300 CPU Ready*  
**UP**

**UP C32**

*Opteron™ 6300 CPU Ready*  
**G34 2U Twin²®**



MODEL	A+ Server 1012G-MTF	A+ Server 1012C-MRF	A+ Server 2122TG-H6IBQRF/ A+ Server 2122TG-H6RF
Processor Support	<b>16/12/8/4</b> -Core AMD Opteron™ 6000 Series Processors	<b>8/6</b> -Core AMD Opteron™ 4000 Series Processors	<b>16/12/8/4</b> -Core AMD Opteron™ 6000 Series Processors
Key Applications	File/print server, firewall applications, mail server, web server for small business, server appliance, cluster node	File/print server, firewall applications, mail server, web server for small business, server appliance, cluster node	HPC cluster computer nodes, datacenter, data farm, front-end server and other computing intensive applications
Outstanding Features	<ul style="list-style-type: none"> <li>• Short depth chassis</li> <li>• 4 hot-swap 3.5" SATA drive bays</li> <li>• RAID: 0, 1, 10</li> <li>• 256GB DDR3 1600/1333/1066 SDRAM</li> <li>• 350W Gold Level high-efficiency power supply</li> <li>• IPMI 2.0 management</li> <li>• Cost-effective</li> </ul>	<ul style="list-style-type: none"> <li>• Optimized for shallow racks</li> <li>• 128GB DDR3 1600/1333/1066/800 SDRAM</li> <li>• 2 internal 3.5" SATA drive bays</li> <li>• RAID: 0, 1</li> <li>• PCI-E 2.0 x16 support</li> <li>• 2 Gigabit Ethernet ports</li> <li>• Cost-effective</li> <li>• 350W Gold Level high-efficiency power supply</li> </ul>	<ul style="list-style-type: none"> <li>• LSI® 2108 SAS2 RAID controller</li> <li>• Best performance per watt</li> <li>• Four hot-swappable nodes in 2U</li> <li>• Up to 128 Cores in 2U</li> <li>• Quad set of 6 hot-swap 2.5" SATA/SAS drive bays</li> <li>• RAID: 0, 1, 5, 6, 10, 50</li> <li>• More than double computing density and efficiency</li> <li>• Independent power control</li> <li>• Independent cooling control</li> <li>• 1400W Gold Level high-efficiency redundant power</li> <li>• Reduce power cables and power strips</li> <li>• Save maintenance/ management costs</li> </ul>
Serverboard/Chipset	H8SGL-F / HyperTransport™ technology AMD SR5650/SP5100	H8SCM-F / HyperTransport™ technology AMD SR5650/SP5100	H8DGT-HLIBQF/HLF / HyperTransport™ technology AMD SR5690/SP5100
System Memory (Max.)	256GB ECC Registered DDR3 1600/1333/1066 SDRAM in 8 DIMMs	128GB ECC Registered DDR3 1600/1333/1066/800 SDRAM in 4 DIMMs	Quad set of 256GB ECC Registered DDR3 1866/1600/1333/1066 SDRAM in 8 DIMMs
Expansion Slots	1 PCI-E 2.0 x16	1 PCI-E 2.0 x8	Quad set of PCI-E 2.0 x16 (low profile)
Onboard SAS/SCSI/SATA/IDE/RAID	AMD SP5100 for 4 SATA	AMD SP5100 for 2 SATA	Quad set of LSI 2108 for 6 SAS
Connectivity/VGA/Audio	Dual LAN with Intel® 82574L Gigabit Ethernet controller Matrox G200eW graphics controller	Dual LAN with Intel® 82574L Gigabit Ethernet controller Matrox G200eW graphics controller	Quad set of dual LAN w/ Intel® 82576 GbE controller Quad set of Mellanox Connect-X2 40Gbps InfiniBand (H6IBQRF only) Quad set of Matrox G200eW graphics controller
Management	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog
Drive Bays	4 hot-swap 3.5" SATA drive bays with SES2 support	2 internal 3.5" drive bays	Quad set of 6 hot-swap 2.5" SAS/SATA drive bays
Peripheral Bays	1 slim DVD-ROM drive	optional 1 slim DVD-ROM drive	N/A
Power Supply	350W Gold Level high-efficiency power supply	350W Gold Level high-efficiency power supply	1620W Platinum Level high-efficiency redundant power supplies with PMBus
Cooling System	4x 4cm heavy duty fans with air shroud & optimal fan speed control	2x 4cm heavy duty counter-rotating fan with air shroud & optimal fan speed control	Twin set of 2x 8cm heavy duty counter-rotating fans with air shroud & optimal fan speed control
Form Factor	1U Rackmount 437 x 43 x 503mm (17.2" x 1.7" x 19.8")	Mini 1U Rackmount 437 x 43 x 369mm (17.2" x 1.7" x 14.5")	2U Rackmount 438 x 89 x 724mm (17.25" x 3.5" x 28.5")

\* Supermicro UIO card must be installed

\*\* Please check 'Tested Memory List' on Supermicro website for compatibility

**Opteron™ 6300 CPU Ready**   **Opteron™ 6300 CPU Ready**   **Opteron™ 6300 CPU Ready**   **Opteron™ 6300 CPU Ready**  
**G34 2U Twin<sup>2</sup>®**   **G34 2U Twin<sup>2</sup>®**   **G34 2U Twin<sup>2</sup>®**   **G34 2U Twin<sup>2</sup>®**



A+ Server 2022TG-H6RF A+ Server 2022TG-H6IBQRF	A+ Server 2022TG-HLIBQRF A+ Server 2022TG-HLTRF	A+ Server 2122TG-HTRF A+ Server 2122TG-HIBQRF	A+ Server 2022TG-HTRF A+ Server 2022TG-HIBQRF
<b>16/12/8/4-Core AMD Opteron™ 6000 Series Processors</b>	<b>16/12/8/4-Core AMD Opteron™ 6000 Series Processors</b>	<b>16/12/8/4-Core AMD Opteron™ 6000 Series Processors</b>	<b>16/12/8/4-Core AMD Opteron™ 6000 Series Processors</b>
HPC cluster computer nodes, datacenter, data farm, front-end server and other computing intensive applications	HPC cluster computer nodes, datacenter, data farm, front-end server and other computing intensive applications	HPC cluster computer nodes, datacenter, data farm, front-end server and other computing intensive applications	HPC cluster computer nodes, datacenter, data farm, front-end server and other computing intensive applications
<ul style="list-style-type: none"> <li>• LSI 2108 SAS2 RAID controller</li> <li>• Best performance per watt</li> <li>• Four hot-swappable nodes in 2U</li> <li>• Up to 128 Cores in 2U</li> <li>• Quad set of 3 hot-swap 3.5" SATA/SAS drive bays</li> <li>• RAID: 0, 1</li> <li>• More than double computing density and efficiency</li> <li>• Independent power control</li> <li>• Independent cooling control</li> <li>• 1620W Platinum Level high-efficiency redundant power</li> <li>• Reduce power cables and power strips</li> <li>• Save maintenance/ management costs</li> </ul>	<ul style="list-style-type: none"> <li>• Best performance per watt</li> <li>• Four hot-swappable nodes in 2U</li> <li>• Up to 128 Cores in 2U</li> <li>• Quad set of 3 hot-swap 3.5" SATA drive bays</li> <li>• RAID: 0, 1</li> <li>• More than double computing density and efficiency</li> <li>• Independent power control</li> <li>• Independent cooling control</li> <li>• 1620W Platinum Level high-efficiency redundant power</li> <li>• Reduce power cables and power strips</li> <li>• Save maintenance/ management costs</li> </ul>	<ul style="list-style-type: none"> <li>• Best performance per watt</li> <li>• Four hot-swappable nodes in 2U</li> <li>• Up to 128 Cores in 2U</li> <li>• Quad set of 3 hot-swap 3.5" SATA drive bays</li> <li>• RAID: 0, 1</li> <li>• More than double computing density and efficiency</li> <li>• Independent power control</li> <li>• Independent cooling control</li> <li>• 1400W Gold Level high-efficiency redundant power</li> <li>• Save maintenance/ management costs</li> </ul>	<ul style="list-style-type: none"> <li>• Best performance per watt</li> <li>• Four hot-swappable nodes in 2U</li> <li>• Up to 128 Cores in 2U</li> <li>• Quad set of 3 hot-swap 3.5" SATA drive bays</li> <li>• RAID: 0, 1</li> <li>• More than double computing density and efficiency</li> <li>• Independent power control</li> <li>• Independent cooling control</li> <li>• 1400W Gold Level high-efficiency redundant power</li> <li>• Reduce power cables and power strips</li> <li>• Save maintenance/ management costs</li> </ul>
H8DGT-HLIBQF/HLF / HyperTransport™ technology AMD SR5690/SP5100	H8DGT-HLIBQF/HLF / HyperTransport™ technology AMD SR5690/SP5100	H8DGT-HF/HIBQF / HyperTransport™ technology AMD SR5670/SP5100	H8DGT-HF/HIBQF / HyperTransport™ technology AMD SR5670/SP5100
Quad set of 256GB ECC Registered DDR3 1866/1600/1333/1066 SDRAM in 8 DIMMs	Quad set of 256GB ECC Registered DDR3 1866/1600/1333/1066 SDRAM in 8 DIMMs	Quad set of 512GB ECC Registered DDR3 1600/1333/1066 SDRAM in 16 DIMMs	Quad set of 512GB ECC Registered DDR3 1600/1333/1066 SDRAM in 16 DIMMs
Quad set of PCI-E 2.0 x16 (low profile)	Quad set of PCI-E 2.0 x16 (low profile)	Quad set of PCI-E 2.0 x16 (low profile) (For add-on card up to 5.9" in length)	Quad set of PCI-E 2.0 x16 (low profile) (For add-on card up to 5.9" in length)
Quad set of LSI 2108 for 3 SAS	Quad set of AMD SP5100 for 3 SATA	Quad set of AMD SP5100 for 6 SATA	Quad set of AMD SP5100 for 3 SATA
Quad set of dual LAN w/ Intel® 82576 GbE controller Quad set of Mellanox Connect-X2 40Gbps InfiniBand (H6IBQRF only) Quad set of Matrox G200eW graphics controller	Quad set of dual LAN w/ Intel® 82576 GbE controller Quad set of Mellanox Connect-X2 40Gbps InfiniBand (HLIBQRF only) Quad set of Matrox G200eW graphics controller	Quad set of dual LAN w/ Intel® 82576 GbE controller Quad set of Mellanox Connect-X2 40Gbps InfiniBand (HIBQRF only) Quad set of Matrox G200eW graphics controller	Quad set of dual LAN w/ Intel® 82576 GbE controller Quad set of Mellanox Connect-X2 40Gbps InfiniBand (HIBQRF only) Quad set of Matrox G200eW graphics controller
IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog
Quad set of 3 hot-swap 3.5" SAS drive bays	Quad set of 3 hot-swap 3.5" SATA drive bays	Quad set of 6 hot-swap 2.5" SATA drive bays	Quad set of 3 hot-swap 3.5" SATA drive bays
N/A	N/A	N/A	N/A
1620W Platinum Level high-efficiency redundant power supplies with PMBus	1620W Platinum Level high-efficiency redundant power supplies with PMBus	1400W Gold Level high-efficiency redundant power supplies with PMBus	1400W Gold Level high-efficiency redundant power supplies with PMBus
Twin set of 2x 8cm heavy duty counter-rotating fans with air shroud & optimal fan speed control	Twin set of 2x 8cm heavy duty counter-rotating fans with air shroud & optimal fan speed control	Twin set of 2x 8cm heavy duty counter-rotating fans with air shroud & optimal fan speed control	Twin set of 2x 8cm heavy duty counter-rotating fans with air shroud & optimal fan speed control
2U Rackmount 438 x 89 x 724mm (17.25" x 3.5" x 28.5")	2U Rackmount 438 x 89 x 724mm (17.25" x 3.5" x 28.5")	2U Rackmount 438 x 89 x 724mm (17.25" x 3.5" x 28.5")	2U Rackmount 438 x 89 x 724mm (17.25" x 3.5" x 28.5")



MODEL	A+ Server 2122TC-H6RF4 A+ Server 2022TC-HTRF4	A+ Server 2022TC-BTRF/ A+ Server 2022TC-BIBQRF	A+ Server 2122TC-DL6RF4
Processor Support	8/6/4-Core AMD Opteron™ 4000 Series Processors	8/6/4-Core AMD Opteron™ 4000 Series Processors	8/6/4-Core AMD Opteron™ 4000 Series Processors
Key Applications	HPC cluster computer nodes, datacenter, data farm, front-end server and other computing intensive applications	HPC cluster computer nodes, datacenter, data farm, front-end server and other computing intensive applications	HPC cluster computer nodes, storage nodes, datacenter, data farm, front-end server and other computing intensive applications
Outstanding Features	<ul style="list-style-type: none"> <li>• LSI® 2008 SAS2 RAID controller (2122TC-H6RF4 only)</li> <li>• Best performance per watt</li> <li>• 4 hot-swappable nodes in 2U</li> <li>• Quad set of 6 hot-swap 2.5" SATA/SAS drive bays (2122TC-H6RF4 only)</li> <li>• Quad set of 3 hot-swap 3.5" SAT drive bays (2022TC-HTRF4 only)</li> <li>• RAID : 0, 1, 5, 6, 10, 50 (2122TC-H6RF4 only)</li> <li>• RAID : 0, 1 (2022TC-HTRF4 only)</li> <li>• More than double computing density and efficiency</li> <li>• Independent power control</li> <li>• Independent cooling control</li> <li>• 1620W Platinum Level high-efficiency redundant power</li> <li>• Reduce power cables and power strips</li> <li>• Save maintenance/ management costs</li> </ul>	<ul style="list-style-type: none"> <li>• Best performance per watt</li> <li>• 4 hot-swappable nodes in 2U</li> <li>• Quad set of 3 hot-swap 3.5" SATA drive bays</li> <li>• RAID : 0, 1</li> <li>• More than double computing density and efficiency</li> <li>• Independent power control</li> <li>• Independent cooling control</li> <li>• 1400W Gold Level high-efficiency redundant power</li> <li>• Reduce power cables and power strips</li> <li>• Save maintenance/ management costs</li> </ul>	<ul style="list-style-type: none"> <li>• LSI® 2008 SAS2 RAID controller</li> <li>• Best performance per watt</li> <li>• 2 hot-swappable nodes in 2U</li> <li>• 12 hot-swap 2.5" SAS drive bays per node</li> <li>• RAID : 0, 1, 10</li> <li>• More than double computing density and efficiency</li> <li>• Independent power control</li> <li>• Independent cooling control</li> <li>• 1280W Platinum Level high-efficiency redundant power</li> <li>• Reduce power cables and power strips</li> <li>• Save maintenance/ management costs</li> </ul>
Serverboard/Chipset	H8DCT-HLN4F / HyperTransport™ technology AMD SR5670/SP5100	H8DCT-F-/IBQF / HyperTransport™ technology AMD SR5670/SP5100	H8DCT-HLN4F HyperTransport™ technology AMD SR5670/SP5100
System Memory (Max.)	Quad set of 192GB ECC Registered or 64GB unbuffered ECC/non-ECC DDR3 1600/1333/1066 SDRAM in 12 DIMMs	Quad set of 192GB ECC Registered or 64GB unbuffered ECC/non-ECC DDR3 1600/1333/1066 SDRAM in 12 DIMMs	Twin set of 192GB ECC Registered DDR3 1600/1333/1066 SDRAM in 12 DIMMs
Expansion Slots	Quad set of PCI-E 2.0 x16 (low profile)	Quad set of PCI-E 2.0 x16 (low profile)	Two set of PCI-E 2.0 x16 (low profile)
Onboard SAS/SCSI/SATA/IDE/RAID	Quad set of LSI 2108 SAS Controller (2122TC-H6RF4 only) Quad set of AMD SP5100 for 3 SATA	Quad set of AMD SP5100 for 3 SATA	Two set of LSI 2008 for SAS2 with expander
Connectivity/VGA/Audio	Quad set of four LAN w/ Intel® i350 GbE controller	Quad set of dual LAN w/ Intel® 82576 GbE controller Quad set of Mellanox Connect-X2 40Gbps InfiniBand (BIBQRF only) Quad set of Matrox G200eW graphics controller	Dual set of Quad LAN w/ Intel® I350 GbE controller Dual set of Matrox G200eW graphics controller
Management	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog
Drive Bays	2122TC-H6RF4: Quad set of 6 hot-swap 2.5" SAS/SATA drive bays 2022TC-HTRF4: Quad set of 3 hot-swap 3.5" SATA drive bays	Quad set of 3 hot-swap 3.5" SATA drive bays	Dual set of 12 hot-swap 2.5" SAS drive bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	1620W Platinum Level high-efficiency redundant power supplies with PMBus	1400W Gold Level high-efficiency redundant power supplies with PMBus	1280W Platinum Level high-efficiency redundant power supplies with PMBus
Cooling System	Twin set of 2x 8cm heavy duty counter-rotating fans with air shroud & optimal fan speed control	Twin set of 2x 8cm heavy duty counter-rotating fans with air shroud & optimal fan speed control	Twin set of 2x 8cm heavy duty counter-rotating fans with air shroud & optimal fan speed control
Form Factor	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5")	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5")	2U Rackmount 438 x 89 x 724mm (17.25" x 3.5" x 28.5")

\* Supermicro U10 card must be installed

\* Please check 'Tested Memory List' on Supermicro website for compatibility

**Opteron™ 6300 CPU Ready  
Resource Optimized**



**Opteron™ 6300 CPU Ready  
UIO Server**



A+ Server 2022G-URF4+	A+ Server 2021A-32R+F/ A+ Server 2021A-T2R+F	A+ Server 2022G-URF	A+ Server 2021M-UR+(V/B)
<b>16/12/8/4-Core AMD Opteron™ 6000 Series Processors</b>	<b>6-Core AMD Opteron™ 2000 Series Processors</b>	<b>16/12/8/4-Core AMD Opteron™ 6000 Series Processors</b>	<b>6-Core AMD Opteron™ 2000 Series Processors</b>
High-end enterprise server, SQL server, high performance computer cluster (HPCC)	Business critical applications, virtualization, front-end server, database applications, primary server for mid-size companies, internet, e-business, server clustering	High-end enterprise server, SQL server, high performance computer cluster (HPCC)	High-end enterprise server, SQL server, high performance computer cluster (HPCC)
<ul style="list-style-type: none"> <li>• 8 hot-swap 3.5" SATA/SAS drive bays (addition UIO SAS card required)</li> <li>• Resource optimized system solution</li> <li>• 4 Gigabit Ethernet ports</li> <li>• 768GB DDR3 1600/1333/1066 SDRAM in 24 DIMMs</li> <li>• Full-Height Full-Length expansion cards</li> <li>• IPMI 2.0 management</li> <li>• 920W Platinum-Level</li> </ul>	<ul style="list-style-type: none"> <li>• Up to 8 drive bays</li> <li>• Low-profile PCI-E 2.0 slots</li> <li>• 128GB DDR2 800/667/533 SDRAM</li> <li>• 2 Gigabit Ethernet ports</li> <li>• SAS RAID support (2021A-32R+ only)</li> <li>• IPMI 2.0, KVM with Virtual Media</li> <li>• 720W Gold Level redundant power supplies</li> </ul>	<ul style="list-style-type: none"> <li>• 8 hot-swap 3.5" SATA/SAS drive bays (addition UIO SAS card required)</li> <li>• Universal I/O slot and PCI-E</li> <li>• 512GB DDR3 1600/1333/1066 SDRAM</li> <li>• 2 Gigabit Ethernet ports</li> <li>• IPMI 2.0 management</li> <li>• 720W Gold Level</li> </ul>	<ul style="list-style-type: none"> <li>• 8 variable hard drive bays (UIO)</li> <li>• Universal I/O slot and PCI-E</li> <li>• 128GB DDR2 800/667/533 SDRAM</li> <li>• 2 Gigabit Ethernet ports</li> <li>• SIMSO(+) (IPMI 2.0) management</li> <li>• 700W high-efficiency redundant power supplies</li> </ul>
H8DGU-LN4F+ / HyperTransport™ technology AMD SR5690/SP5100	H8DI3+-F/H8DII+-F / HyperTransport™ technology AMD SR5690/SP5100	H8DGU-F / HyperTransport™ technology AMD SR5670/SP5100	H8DMU+ / HyperTransport™ technology NVIDIA MCP55-Pro
768GB ECC Registered DDR3 1600/1333/1066 SDRAM in 24 DIMMs	128GB ECC Registered DDR2 800/667/533 SDRAM in 16 DIMMs**	512GB ECC Registered DDR3 1600/1333/1066 SDRAM in 16 DIMMs	128GB ECC Registered DDR2 800/667/533 SDRAM in 16 DIMMs**
3 PCI-E 2.0 x8 1 Universal I/O (UIO) slot	2 PCI-E 2.0 x8 (using x16 slot) 1 PCI-E 2.0 x4 (using x8 slot) 2 64-bit PCI-X 133/100 MHz (All Low-profile slots)	1 Universal I/O (UIO) slot 3 PCI-E 2.0 x8 (full size)	4 PCI-E 2.0 x8 1 PCI-E 2.0 x4
UIO SAS 8 port controller* AMD SP5100 for 6 SATA2	LSI 1068E SAS Controller (2021A-32R+ only) AMD SP5100 for 6 SATA2	UIO SAS 8 port controller* AMD SP5100 for 6 SATA2	UIO SAS 8 port controller* NVIDIA MCP55-Pro for 4 SATA
Four LAN with two Intel® 82576 Gigabit Ethernet controllers Matrox G200eW graphics controller	Dual LAN with two Intel® 82574L Gigabit Ethernet Matrox G200eW graphics controller	Dual LAN with Intel® 82576 Gigabit Ethernet controller Matrox G200eW graphics controller	Dual LAN with NVIDIA MCP55-Pro Gigabit Ethernet controller ATI® ES1000 16MB PCI graphics controller
IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog	SIMSO(+) (IPMI 2.0), SuperDoctor III, Watch Dog
8 hot-swap 3.5" SAS/SATA drive bays	8 hot-swap 3.5" SAS/SATA drive bays	8 hot-swap 3.5" SAS/SATA drive bays	8 hot-swap 3.5" SAS/SATA drive bays
1 slim DVD-ROM drive	Optional 1 slim DVD-ROM drive	1 slim DVD-ROM drive	1 slim DVD-ROM drive
920W Platinum Level high-efficiency redundant power supplies with I²C built-in	720W Gold Level high-efficiency redundant power supplies with I²C built-in	720W Gold Level high-efficiency redundant power supplies with I²C built-in	700W high-efficiency redundant power supplies with I²C built-in
4x 8cm heavy duty fans with air shroud & optimal fan speed control	3x 8cm heavy duty fans with air shroud & optimal fan speed control	3x 8cm heavy duty fans with air shroud & optimal fan speed control	3x 8cm heavy duty fans with air shroud & optimal fan speed control
2U Rackmount 437 x 89 x 704mm (17.2" x 3.5" x 27.75")	2U Rackmount 437 x 89 x 648mm (17.2" x 3.5" x 25.5")	2U Rackmount 437 x 89 x 648mm (17.2" x 3.5" x 25.5")	2U Rackmount 437 x 89 x 648mm (17.2" x 3.5" x 25.5")

\* Supermicro UIO card must be installed

\*\* Fully populated DDR2 800/667 will be downgraded to DDR2 533



MODEL	GPU Optimized A+ Server 4021GA-62R+F	Opteron™ 6300 CPU Ready A+ Server 4022G-6F	A+ Workstation 4021A-T2 A+ Workstation 4021A-T2B
Processor Support	6-Core AMD Opteron™ 2000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	6-Core AMD Opteron™ 2000 Series Processors
Key Applications	Ultra-high performance workstation, medical imaging, oil and gas simulation, quantum chemistry, financial simulation, astrophysics	High-end enterprise server, SQL server, high performance computer cluster (HPCC)	High-end workstation, business critical applications, front-end server, database applications, video server
Outstanding Features	<ul style="list-style-type: none"> <li>• GPU optimized 4U/tower solution</li> <li>• Up to 4 TeraFLOPS of performance per system</li> <li>• Up to 4 GPUs installed per system</li> <li>• Supports up to 7 expansion cards</li> <li>• Support PCI-E 2.0</li> <li>• IPMI 2.0 + KVM w/ dedicated LAN</li> <li>• 1400W Gold Level redundant power supplies</li> </ul>	<ul style="list-style-type: none"> <li>• Mainstream system in 4U/Tower form factor</li> <li>• 100% cooling redundancy</li> <li>• 8 hot-swap SAS/SATA Drive Bays</li> <li>• RAID: 0, 1, 5(optional), 10</li> <li>• 512GB DDR3 1600/1333/1066 SDRAM in 16 DIMMs</li> <li>• 6 PCI-E 2.0 expansion slots</li> <li>• IPMI 2.0 management</li> <li>• 920W Platinum Level redundant power supplies (optional)</li> </ul>	<ul style="list-style-type: none"> <li>• SuperQuiet mode</li> <li>• Up to 8 SATA drive bays</li> <li>• 2 PCI-E x16</li> <li>• 64GB DDR2 800/667/533 SDRAM</li> <li>• 2 Gigabit Ethernet ports</li> <li>• SIMLP(+) (IPMI 2.0) management</li> <li>• Low-noise 645W with fan speed control</li> </ul>
Serverboard/Chipset	H8DA6+-F / HyperTransport™ technology Dual AMD SR5690/SP5100	H8DG6-F / HyperTransport™ technology Dual AMD SR5690/SP5100	H8DAE-2 / HyperTransport™ technology NVIDIA MCP55-Pro + IO55 NEC 720400 PCI-X Bridge
System Memory (Max.)	128GB ECC Registered DDR2 800/667/533 SDRAM in 16 DIMM sockets	512GB ECC Registered DDR3 1600/1333/1066 SDRAM in 16 DIMMs	64GB ECC Registered DDR2 800/667/533 SDRAM in 8 DIMMs
Expansion Slots	4 PCI-E 2.0 x16 2 PCI-E 2.0 x4 (using x8 slots) 1 32-bit PCI	3 PCI-E 2.0 x16 1 PCI-E 2.0 x8 2 PCI-E 2.0 x4 (using x8 slots)	2 PCI-E x16 1 PCI-E x8 1 PCI-E x4 (using x8 slot) 1 64-bit PCI-X 133 MHz 1 64-bit PCI-X 100 MHz SIMLP IPMI slot
Onboard SAS/SCSI/SATA/IDE/RAID	LSI 2008 SAS2 Controller AMD SP5100 for 6 SATA2	LSI 2008 SAS2 Controller AMD SP5100 for 6 SATA	NVIDIA MCP55-Pro for 6 SATA
Connectivity/VGA/Audio	Dual LAN with Intel® 82576 Gigabit Ethernet controller Matrox G200eW graphics controller	Dual LAN with Intel® 82576 Gigabit Ethernet controllers Matrox G200eW graphics controller	Dual LAN with NVIDIA MCP55-Pro Gigabit Ethernet controller ALC883 audio CODEC high definition 7.1 channel sound
Management	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog	SIMLP(+) (IPMI 2.0), SuperDoctor III, Watch Dog
Drive Bays	8 hot-swap 3.5" SAS2/SATA drive bays	8 hot-swap 3.5" SAS or SATA drive bays	6 hot-swap 3.5" SATA drive bays and 2 spare SATA drive bays 2x 5.25" drive bays
Peripheral Bays	3x 5.25" drive bays optional floppy drive	2x 5.25" drive bays optional floppy drive	2x 5.25" drive bays optional floppy drive
Power Supply	1400W Gold Level high-efficiency redundant power supplies with PMBus 4 sets of 6-pin 12V for GPU or graphics cards	920W Platinum Level high-efficiency power supply with PMBus	645W with low-noise fan speed control
Cooling System	4x 9.2cm hot-swap cooling fans with air shroud 2x 8cm exhaust fans optimal fan speed control	3x 8cm hot-swap cooling fans & 2x 8cm exhaust fans with air shroud & optimal fan speed control	4x 8cm 4-pin Pulse Width Modulated (PWM) fans with air shroud 1x 8cm exhaust fan
Form Factor	4U Rackmount (optional) /Tower 437 x 178 x 648mm (17.2" x 7" x 25.5")	4U Rackmount (optional) /Tower 437 x 178 x 648mm (17.2" x 7" x 25.5")	4U Rackmount /Tower 437 x 178 x 648mm (17.2" x 7" x 25.5")

\*\* Fully populated DDR2 800/667 will be downgraded to DDR2 533

\*\* Please check 'Tested Memory List' on Supermicro website for compatibility

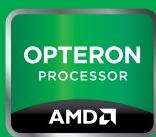


A+ Server 4021M-32R	A+ Server 1041A-T2F A+ Server 1041A-T2FB	A+ Server 1042G-LTF	A+ Server 1042G-TF
6-Core AMD Opteron™ 2000 Series Processors	6-Core AMD Opteron™ 8000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors
Mission-critical applications, enterprise server, large database, e-business, Internet, online transaction processing, NAS	Mission critical applications, enterprise server, large database, e-business, online transaction processing	High performance computer cluster (HPCC) Virtualization server, online transaction processing	High performance computer cluster (HPCC) Virtualization server, online transaction processing
<ul style="list-style-type: none"> <li>• 100% cooling redundancy</li> <li>• 8 SAS/SATA drive bays</li> <li>• PCI-X and PCI-E</li> <li>• 64GB DDR2 800/667/533 SDRAM</li> <li>• 2 Gigabit Ethernet ports</li> <li>• SIMLP(+) (IPMI 2.0) management</li> <li>• 800W high-efficiency redundant power supplies</li> </ul>	<ul style="list-style-type: none"> <li>• 1U 4-way system</li> <li>• 3 SATA drive bays</li> <li>• 1 PCI-E 2.0 x16</li> <li>• 128GB DDR2 800/667/533 SDRAM</li> <li>• 2 Gigabit Ethernet ports</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• 1000W high-efficiency power supply</li> </ul>	<ul style="list-style-type: none"> <li>• 1U 4-way system (64-cores)</li> <li>• 3 hot-swap 3.5" SATA drive bays</li> <li>• RAID 0, 1, 10</li> <li>• 1 PCI-E x16 slot</li> <li>• 512GB DDR3 1866/1600/1333/1066 SDRAM</li> <li>• 2 Gigabit Ethernet ports</li> <li>• IPMI 2.0 management with dedicated LAN</li> <li>• 1400W Gold Level high-efficiency power supply</li> </ul>	<ul style="list-style-type: none"> <li>• 1U 4-way system (64-cores)</li> <li>• 3 hot-swap 3.5" SATA drive bays</li> <li>• RAID 0, 1, 10</li> <li>• 1 Low-profile PCI-E x16 slot</li> <li>• 1TB DDR3 1600/1333/1066/SDRAM</li> <li>• 2 Gigabit Ethernet ports</li> <li>• IPMI 2.0 management with dedicated LAN</li> <li>• 1400W Gold Level high-efficiency power supply</li> </ul>
H8DM3-2 / HyperTransport™ technology NVIDIA MCP55-Pro AMD 8132 PCI-X Tunnel	H8QIi+-F / HyperTransport™ technology AMD SR5690/SP5100	H8QGL-iF+ / HyperTransport™ technology AMD SR5690/SP5100	H8QGi+-F / HyperTransport™ technology AMD SR5690/SP5100
64GB ECC Registered DDR2 800/667/533 SDRAM in 8 DIMMs	128GB ECC Registered DDR2 800/667/533 SDRAM in 16 DIMMs	512GB ECC Registered DDR3 1866/1600/1333/1066 SDRAM in 16 DIMMs	1TB ECC Registered DDR3 1600/1333/1066 SDRAM in 32 DIMMs
2 PCI-E x8 1 PCI-E x4 (using x8 slot) 2 64-bit PCI-X 133/100 MHz 1 64-bit PCI-X 133 MHz SIMLP IPMI slot	1 PCI-E 2.0 x16 or HyperTransport conn. Universal I/O slot	1 PCI-E 2.0 x16	1 PCI-E 2.0 x16 (low profile)
LSI 1068E SAS Controller NVIDIA MCP55-Pro for 6 SATA	AMD SP5100 for 3 SATA	AMD SP5100 for 3 SATA	AMD SP5100 for 3 SATA
Dual LAN with NVIDIA MCP55-Pro Gigabit Ethernet controller ATI® ES1000 16MB PCI graphics controller	Dual LAN with Intel® 82576 Gigabit Ethernet controller Matrox G200eW graphics controller	Dual LAN with Intel® 82576 Gigabit Ethernet controller Matrox G200eW graphics controller	Dual LAN with Intel® 82576 Gigabit Ethernet controller Matrox G200eW graphics controller
SIMLP(+) (IPMI 2.0), SuperDoctor III, Watch Dog	IPMI 2.0, KVM and VM options, Watch Dog, SuperDoctor III	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog
8 hot-swap 3.5" SAS/SATA drive bays	3 hot-swap 3.5" SATA drive bays	3 hot-swap 3.5" SATA drive bays	3 hot-swap 3.5" SATA drive bays
2x 5.25" drive bays optional floppy drive	1 slim DVD-ROM drive optional slim floppy drive	Optional 1 slim DVD-ROM drive	optional 1 slim DVD-ROM drive
800W high-efficiency redundant power supplies with I²C built-in	1000W high-efficiency power supply with I²C built-in	1400W Gold Level high efficiency power supply with I²C built-in	1400W Gold Level high efficiency power supply with I²C built-in
3x 8cm hot-swap cooling fans & 2x 8cm exhaust fans with air shroud & optimal fan speed control	6x 4cm heavy duty counter-rotating fans with air shroud & optimal fan speed control	6x 4cm heavy duty counter-rotating fans with air shroud & optimal fan speed control	6x 4cm heavy duty counter-rotating fans with air shroud & optimal fan speed control
4U Rackmount/Tower 437 x 178 x 648mm (17.2" x 7" x 25.5")	1U Rackmount 437 x 43 x 704mm (17.2" x 1.7" x 27.75")	1U Rackmount 437 x 43 x 705mm (17.2" x 1.7" x 27.75")	1U Rackmount 437 x 43 x 705mm (17.2" x 1.7" x 27.75")

**MicroCloud**  
**12x UP Hot-Pluggable Nodes**  
**1620W Platinum Level Power**

**Opteron™ 6300 CPU Ready**  
**4-Way**

**4-Way**



MODEL	A+ Server 3012MA-H12TRF	A+ Server 2042G-6RF A+ Server 2042G-TRF	A+ Server 2041M-32R+B A+ Server 2041M-72R+B
Processor Support	8/4 Core AMD Opteron™ 3000 series processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	6-Core AMD Opteron™ 8000 Series Processors
Key Applications	Cloud Computing, Web server, Datacenter applications	Mission-critical applications, enterprise server, large database, e-business, Internet, online transaction processing	Mission-critical applications, enterprise server, large database, HPC, video broadcasting
Outstanding Features	<ul style="list-style-type: none"> <li>• 12 UP hot-pluggable nodes in 3U</li> <li>• 2x 3.5" or 4x 2.5" (optional) SATA drive bays per node</li> <li>• RAID 0, 1, 10 (optional with 4x 2.5" drive bays installed)</li> <li>• Up to 32GB DDR3 UDIMMs per node</li> <li>• Micro LP PCI-E 2.0 x8</li> <li>• IPMI 2.0 + KVM w/dedicated LAN</li> <li>• 1620W redundant Platinum Level high-efficiency power supplies</li> <li>• Independent power control</li> </ul>	<ul style="list-style-type: none"> <li>• Enterprise level 4-way system</li> <li>• LSI® 2008 SAS2 RAID controller (2042G-6RF only)</li> <li>• 6 hot-swap 3.5" SATA/SAS drive bays +1 IX 3.5 hidden bays (SAS for 2042G-6RF only)</li> <li>• RAID : 0, 1, 10; 5 optional (2042G-6RF only)</li> <li>• RAID : 0, 1, 10 (2042G-TRF only)</li> <li>• 1TB DDR3 1600/1333/1066 SDRAM</li> <li>• 2 Gigabit Ethernet ports</li> <li>• IPMI 2.0 management with dedicated LAN</li> <li>• Redundant 1400W Gold Level high-efficiency power supply</li> </ul>	<ul style="list-style-type: none"> <li>• Enterprise level 4-way system</li> <li>• Up to 6 SAS/SATA drive bays</li> <li>• 256GB DDR2 800/667/533 SDRAM</li> <li>• 2 Gigabit Ethernet ports</li> <li>• SIMLC/SIM1U+ (IPMI 2.0) management</li> <li>• Redundant 1200W power supply</li> </ul>
Serverboard/Chipset	H8SME-F AMD SR5650 / SP5100	H8QG6-F / i-F / HyperTransport™ technology AMD SR5690 / SR5670 & SP5100	H8QM3-2 / H8QMi-2 / HyperTransport™ technology NVIDIA MCP55-Pro + IO-55 NEC 720400 PCI-X bridge
System Memory (Max.)	Twelve sets of 4 DIMM Sockets ( Per Node) up to 32GB DDR3 ECC VLP-UDIMM 1600/1333/1066	1TB ECC Registered DDR3 1600/1333/1066 SDRAM in 32 DIMMs	256GB ECC Registered DDR2 800/667/533 SDRAM in 32 DIMMs**
Expansion Slots	Twelve sets of Micro LP PCI-E 2.0 x8 slot	2 PCI-E 2.0 x16 (low profile) 1 PCI-E 2.0 x8 (low profile) 1 Universal I/O or PCI-E 2.0 x8 (low profile)	2 PCI-E x16 (low profile) 1 PCI-E x8 (low profile) 1 PCI-E x4 (in x8 slot) (low profile) 1 64-bit PCI-X 133 MHz SIMLC IPMI slot
Onboard SAS/SCSI/SATA/IDE/RAID	AMD SP5100 for 4 SATA	LSI® 2008 SAS2 Controller for 6 SAS2 (2042G-6RF only) AMD SP5100 for 6 SATA (2042G-TRF only)	LSI® 1068E SAS Controller for 6 SAS (2041M-32R+ only) NVIDIA MCP55-Pro for 6 SATA (2041M-T2R+ only)
Connectivity/VGA/Audio	Dedicated management LAN port; 2 Gigabit LAN Port (W/ Micro LP card) Matrox G200eW graphics controller	Dual LAN with Intel® 82576 Gigabit Ethernet controller Matrox G200eW graphics controller	Dual LAN with Intel® 82546GB Gigabit Ethernet controller ATI® ES1000 16MB PCI graphics controller
Management	Twelve sets of IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog	SIMLC/SIM1U+ (IPMI 2.0), SuperDoctor III, Watch Dog
Drive Bays	Twelve sets of 2x 3.5" or 4x 2.5" (optional) SATA drive bays (internal)	6 hot-swap 3.5" SAS or SATA drive bays	6 hot-swap 3.5" SAS or SATA drive bays
Peripheral Bays	N/A	1 slim DVD-ROM drive	1 slim DVD-ROM drive
Power Supply	1620W redundant Platinum Level high-efficiency power supplies	1400W Gold Level high-efficiency redundant power supplies with I²C built-in	1200W high-efficiency redundant power supplies with I²C built-in
Cooling System	4x 9 cm heavy duty fans with optimal fan speed control	6x 8cm heavy duty fans with air shroud & optimal fan speed control	6x 8cm heavy duty fans with air shroud & optimal fan speed control
Form Factor	3U Rackmount 749.3 x 444.5 x 132.5mm (29.5" x 17.5" x 5.21")	2U Rackmount 437 x 89 x 709mm (17.2" x 3.5" x 27.9")	2U Rackmount 437 x 89 x 708mm (17.2" x 3.5" x 27.75")

\*\* Fully populated DDR2 800/667 will be downgraded to DDR2 533

\*\* Please check 'Tested Memory List' on Supermicro website for compatibility



A+ Server 2042G-72RF4	A+ Server 4042G-72RF4	A+ Server 4042G-6RF A+ Server 4042G-TRF	A+ Server 4041M-32R+B
<b>16/12/8/4-Core AMD Opteron™ 6000 Series Processors</b>	<b>16/12/8/4-Core AMD Opteron™ 6000 Series Processors</b>	<b>16/12/8/4-Core AMD Opteron™ 6000 Series Processors</b>	<b>6-Core AMD Opteron™ 8000 Series Processors</b>
Mission-critical applications, enterprise server, large database, e-business, Internet, online transaction processing, High performance computer cluster (HPCC)	Mission-critical applications, enterprise server, large database, e-business, Internet, online transaction processing, High performance computer cluster (HPCC)	Mission-critical applications, enterprise server, large database, e-business, Internet, online transaction processing	Mission-critical applications, enterprise server, large database, HPC, video broadcasting
<ul style="list-style-type: none"> <li>Enterprise level 4-way system</li> <li>LSI 2208 SAS2 RAID controller</li> <li>6 hot-swap 3.5" SATA/SAS drive bays +1 hidden 3.5" drive bay</li> <li>RAID : 0, 1, 5, 6, 10, 50</li> <li>1TB DDR3 1600/1333/1066 SDRAM</li> <li>4 Intel I350 Gigabit Ethernet ports</li> <li>IPMI 2.0 management with dedicated LAN</li> <li>Redundant 1400W Platinum Level 94% high-efficiency redundant power supplies</li> </ul>	<ul style="list-style-type: none"> <li>Enterprise level 4-way system</li> <li>LSI 2208 SAS2 RAID controller</li> <li>5 hot-swap 3.5" SATA/SAS drive bays</li> <li>RAID : 0, 1, 5, 6, 10, 50, 60</li> <li>1TB DDR3 1600/1333/1066 SDRAM</li> <li>4 Intel I350 Gigabit Ethernet ports</li> <li>IPMI 2.0 management with dedicated LAN</li> <li>Redundant 1400W Platinum Level 94% high-efficiency redundant power supplies</li> </ul>	<ul style="list-style-type: none"> <li>Enterprise level 4-way system</li> <li>LSI 2008 SAS2 RAID controller(4042G-6RF only)</li> <li>5 hot-swap 3.5" SATA/SAS drive bays (SAS for 4042G-6RF only)</li> <li>RAID : 0, 1, 10; 5 optional (4042G-6RF only)</li> <li>IPMI 2.0 management with dedicated LAN</li> <li>1TB DDR3 1600/1333/1066 SDRAM</li> <li>2 Gigabit Ethernet ports</li> <li>IPMI 2.0 management with dedicated LAN</li> <li>Redundant 1400W Gold Level high-efficiency power supply</li> </ul>	<ul style="list-style-type: none"> <li>Enterprise level 4-way system</li> <li>Up to 10 SAS drive bays</li> <li>256GB DDR2 800/667/533 SDRAM</li> <li>2 Gigabit Ethernet ports</li> <li>SIMLC/SIM1U+(IPMI 2.0) management</li> <li>Redundant 1200W power supply</li> </ul>
H8QG7-LN4F AMD SR5290/SR5670 *SP5100 + LSI2208	H8QG7-LN4F AMD SR5290/SR5670 *SP5100 + LSI2208	H8QG6-F / i-F / HyperTransport™ technology AMD SR5690/SR5670 & SP5100	H8QM3-2 / HyperTransport™ technology NVIDIA MCP55-Pro + IO55 NEC 720400 PCI-X Bridge
1TB ECC Registered DDR3 1600/13033/1066 in 32 DIMMs	1TB ECC Registered DDR3 1600/13033/1066 in 32 DIMMs	1TB ECC Registered DDR3 1600/1333/1066 SDRAM in 32 DIMMs	256GB ECC Registered DDR3 800/667/533 SDRAM in 32 DIMMs**
2 PCI-E 2.0 x16 (low profile) 2 PCI-E 2.0 x8 (low profile)	2 PCI-E 2.0 x16 2 PCI-E 2.0 x8	2 PCI-E 2.0 x16 1 PCI-E 2.0 x8 1 Universal I/O or PCI-E 2.0 x8	2 PCI-E x16 1 PCI-E x8 1 PCI-E x4 (in x8 slot) 1 64-bit PCI-X 133 MHz SIMLC IPMI slot
LSI® 2208 SAS Controller for 6 + 1 SAS / SATA HW RAID 0, 1, 5, 6, 10,50 support)	LSI® 2208 SAS Controller for 5 +3 SAS / SATA HW RAID 0, 1, 5, 6, 10,50 support)	LSI® 2008 SAS2 Controller (4042G-6RF only) AMD SP5100 for 6 SATA (4042G-TRF only)	LSI® 1068E SAS controller NVIDIA MCP55-Pro for 6 SATA
Quad Intel I350 Gigabit Ethernet Controller Matrox G200eW graphics controller	Quad Intel I350 Gigabit Ethernet Controller Matrox G200eW graphics controller	Dual LAN with Intel® 82576 Gigabit Ethernet controller Matrox G200eW graphics controller	Dual LAN with Intel® 82546GB Gigabit Ethernet controller ATI® ES1000 16MB PCI graphics controller
IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog	SIMLC/SIM1U+(IPMI 2.0), SuperDoctor III, Watch Dog
6 hot-swap 3.5" SAS or SATA drive bays +1 Hidden 3.5" drive bay	Default 1 mobile rack (5x 3.5" drives) Supports up to 2 mobile racks (10 drives)	Default 1 mobile rack (5 drives) Supports up to 2 mobile racks (10 drives)	Default 1 mobile rack (5 drives) Supports up to 2 mobile racks (10 drives)
1 slim DVD-ROM drive (optional)	3x 5.25" drive bays	3x 5.25" drive bays 1 floppy drive	3x 5.25" drive bays 1 floppy drive
1400W Platinum Level 94% high-efficiency redundant power supplies	1400W Platinum Level 94% high-efficiency redundant power supplies	1400W Gold Level high-efficiency redundant power supplies with I²C built-in	1200W redundant power supplies with I²C built-in
6x 8cm heavy duty fans with air shroud & optimal fan speed control	3x 8cm hot-swap cooling fans & 3x 8cm exhaust fans optimal fan speed control	3x 8cm hot-swap cooling fans & 3x 8cm exhaust fans with air shroud & optimal fan speed control	3x 8cm hot-swap cooling fans & 3x 8cm exhaust fans with air shroud & optimal fan speed control
2U Rackmount 437 x 89 x 709mm (17.2" x 3.5" x 27.9")	4U Rackmount (optional) / Tower 452 x 178 x 746mm (17.8" x 7" x 29.4")	4U Rackmount (optional) / Tower 452 x 178 x 746mm (17.8" x 7" x 29.4")	4U Rackmount / Tower 452 x 178 x 746mm (17.8" x 7" x 29.4")

\*\* Fully populated DDR2 800/667 will be downgraded to DDR2 533

# SuperBlade® Servers

## Best Density

Up to 40 processors (640 cores) per 7U enclosure  
Up to 40 2.5" SATA HDD/SSDs per 7U enclosure

## Highest GPU Expansion in the Industry

Up to 20 NVIDIA® Tesla® M-Series GPUs per 7U enclosure

## Fastest and Most Cost-Effective Networking Solution

FDR/QDR InfiniBand switch  
10GbE switch - layer 2/3 switch  
1/10GbE switch - layer 2/3 switch  
1GbE switch - layer 2 switch  
1GbE and 10GbE pass-through modules  
Data Center Converged Switch with FCoE

## Outstanding Storage Flexibility

Hot-plug SATA 2.5"  
2.5" or 3.5" options  
Up to four 2.5" SATA hard drive support  
IPMI 2.0 remote management, Virtual media over LAN and kvm over IP capabilities

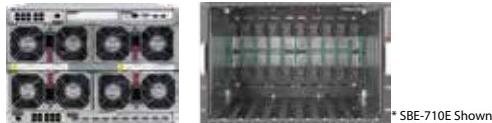
## Lower TCO

Modular design reduces deployment costs  
High computational density reduces facility costs  
High efficiency power supply reduces electricity costs  
Cable reduction improves cooling  
Remote management reduces maintenance cost

## High Efficiency Power for Earth-Friendly Operations

94%+ Platinum Level high efficiency 3000W and 2500W power supplies with N+1 redundancy  
Multiple Choices - 1620W, 2500W or 3000W

# SuperBlade® Enclosures and Cabinet



\* SBE-710E Shown

Model	SBE-710E/Q Series
Server Blade	Up to 10 hot-plug server blades
Module Support	Supports Intel based blades
LED	Power LED, Fault LED
InfiniBand Switch	One hot-plug 4 DDR IB switch (710E) or up to two hot-plug 4 QDR IB switches (710Q)
Gigabit Ethernet Switch	Up to two hot-plug Gigabit Ethernet switches or pass-through modules Up to two hot-plug 10G pass-through modules (710E) Up to two hot-plug 10G Ethernet Switches (710Q)
Management Module	Up to two hot-plug management modules providing remote KVM and IPMI 2.0 functionalities
Power Supply	Hot-swap 1620W/2500W (710E) or 1620W/2500W/3000W (710Q) power supplies, N+1 redundancy
Cooling Design	Front to back
Dimensions (HxWxD)	12.2" x 17.6" x 29"

TwinBlade® Enclosure



\* SBE-720E Shown

Model	SBE-720D/E Series
Server Blade	Up to 10 hot-plug server blades and TwinBlades
Module Support	Supports Intel based blades
LED	Power LED, Fault LED
InfiniBand Switch	Up to two hot-plug 4 QDR IB switches (720E only)
Gigabit Ethernet Switch	Up to two hot-plug Gigabit Ethernet switches or Pass thru model
Management Module	One hot-plug management modules providing remote KVM and IPMI 2.0 functionalities
Power Supply	Hot-swap 2500W/3000W power supplies, N+1 redundancy
Cooling Design	Front to back
Dimensions (HxWxD)	12.2" x 17.6" x 29"

## Personal Supercomputing Mini Rack Cabinet - CSE-RACK14U

Mobility, Protection and Security - Ideal for Office Application/Environment or Personal Supercomputing



- Key Features**
- Mobile 14U Rack Space
  - Ideal for Office Environments - The same height as standard office furniture (30.64"H)
  - Upgradeable - Rear frame mounting
  - Mobile - casters for easy mobility

## Specifications

- 14U height:
- 21.65" W x 34.65"D x 30.64"H
- Supports standard 19" rackmount servers with standard mounting holes
- Front door lock, casters with brakes
- Stability support
- Optional air filter

# SuperBlade® Management

## Key Features

- Remotely manage and monitor server blades, power supplies, cooling fans, and networking switches
- IPMI 2.0 compliant, with KVM over LAN / KVM over IP
- Serial over LAN (SOL)
- Virtual Media Over LAN (Virtual USB Floppy/CD and Drive Redirection)
- LAN Alert-SNMP Trap
- Event Log
- OS Independent
- Hardware Health Monitor
- Remote Power Control
- Management Tools - IPMIView, CLI (Command Line Interface)
- Supports RMCP & RMCP+ Protocols

## Specifications

- VGA port, 2 USB ports
- Remote Management Processor and sub-system
- 1x LAN port
- Video ADC, Video Compress FPGA
- IPMI Management
- Hot-Swap Capable
- GBX Backplane Connector



BMB-CMM-002  
Mini CMM Installs in SBM-XEM-002M,  
SBM-IBS-Q3616M, SBM-IBS-Q3618M  
and SBM-XEM-X10SM

CMM (Chassis Management Module)



SBM-CMM-001



SBM-CMM-003  
TwinBlade® CMM Module

## Space Optimization

When housed within a 19" EIA-310D industry-standard 42U rack, SuperBlade® servers reduce server footprint in the datacenter. Power, cooling and networking devices are removed from each individual server and positioned to the rear of the chassis thereby reducing the required amount of space while increasing flexibility to meet changing business demands. Up to twenty DP blade nodes can be installed in a 7U chassis. Compared to the rack space required by twenty individual 1U servers, the SuperBlade® provides over 65% space savings.



Model	SBA-7222G-T2 (two nodes)	SBA-7142G-T4	SBA-7141A-T
Processors	Two 16/12/8/4-Core Opteron™ 6000 Series per node	Four 16/12/8/4-Core Opteron™ 6000 Series per node	Four 6/4-Core Opteron™ 8000 Series per node
CPUs per 42U Rack	240	240	240
Chipset	AMD SR5650/SP5100	AMD SR5650/SP5100	AMD SR5670/SP5100
Memory Support	RDIMM or UDIMM DDR3 1866/1600/1333/1066 in 8 DIMMs slots /node	RDIMM or UDIMM DDR3 1866/1600/1333/1066 in 16 DIMMs slots	ECC Registered DDR2 800/667 in 16 DIMM slots
Max Memory	256GB(RDIMM)/32GB(UDIMM) /node	512GB(RDIMM)/64GB(UDIMM)	128GB(DIMM)
Expansion & Hard Disk Drive	Two hot-plug 2.5" SATA hard disk drives per node	Four hot-plug 2.5" SATA hard disk drives	One Internal 2.5" SATA hard disk drive
Storage RAID	AMD SP5100 SATA RAID 0, 1	AMD SP5100 SATA RAID 0, 1	AMD SP5100
InfiniBand/10GbE Option	4 QDR (40Gb) InfiniBand or 10GbE mezzanine HCA /node	4 QDR (40Gb) InfiniBand or 10GbE mezzanine HCA	4 QDR (40Gb) InfiniBand or 10GbE mezzanine HCA
Ethernet Interface	Intel 82576 dual-port Gigabit Ethernet controller /node	Intel 82576 dual-port Gigabit Ethernet controller	Intel 82576 dual-port Gigabit Ethernet controller
Management	IPMI 2.0, KVM over IP, Virtual Media over LAN	IPMI 2.0, KVM over IP, Virtual Media over LAN	IPMI 2.0, KVM over IP, Virtual Media over LAN
Graphics	Matrox G200eW	Matrox G200eW	Matrox G200eW
LED Indicators	Power LED, UID/KVM LED, Networking LED, Fault LED /node	Power LED, UID/KVM LED, Networking LED, Fault LED	Power LED, UID/KVM LED, Networking LED, Fault LED
Operating Temp.	10-35°C non-condensing	10-35°C non-condensing	10-35°C non-condensing
Dimensions	11.32" x 1.67" x 20.5"	11.32" x 1.67" x 20.5"	11.32" x 1.67" x 18.9"

# SuperBlade® Networking

## 1Gb Ethernet Switch Solutions



Model	SBM-GEM-001	SBM-GEM-X2C+	SBM-GEM-X3S+
Type	Layer-2 Ethernet switch	Layer-2/3 Ethernet switch	Layer-2/3 Ethernet switch
Internal Ports	Fourteen 1-Gbps downlink ports for LAN interfaces of the server blades	Fourteen/Twenty 1-Gbps downlink ports for LAN interfaces of server blades	Fourteen/Twenty 1-Gbps downlink ports for LAN interfaces of server blades
External Ports	Ten 1-Gbps uplink RJ-45 ports	Three 10-Gbps (Two CX4 & One SFP+) and two 1-Gbps RJ-45 uplink ports, stackable	Three 10-Gbps SFP+ and four 1-Gbps RJ-45 uplink ports
Trunking	Link aggregation support - static (802.3ad)	Link aggregation support - full (802.3ad)	Link aggregation support - full (802.3ad)
Jumbo Frame	Up to 9k bytes	Up to 16k bytes (10G) or 9K bytes (1G)	Up to 16k bytes (10G) or 9K bytes (1G)
Remote Management	Browser-based management	Browser-based management / CLI	Browser-based management / CLI
Layer 2 Capabilities	VLANs, STP, RSTP, 802.1x	VLANs, STP, RSTP, MSTP, IGMP snooping, 802.1x	VLANs, STP, RSTP, MSTP, IGMP snooping, 802.1x
Layer 3 Capabilities		BGP, DVMRP, IGMP, IPv6, OSPF, PIM, RIP, QoS	BGP, DVMRP, IGMP, IPv6, OSPF, PIM, RIP, QoS
OS	Software upgradeable	Software upgradeable	Software upgradeable

\* Supports optional mini-CMM (BMB-CMM-002)

## 10Gb Ethernet and Converged Network Solutions



NEW!

Model	SBM-XEM-X10SM	SBM-XEM-F8X4SM*
Type	Layer 2/3 10Gb Ethernet Switch	Data Center Converged Switch with FCoE
Internal Ports	10/20x internal 10Gb links to ports on mezzanine cards	10/20x internal 10Gb links to ports on mezzanine cards, support DCB, FCoE
External Ports	10/4x 10Gb Ethernet ports with SFP+ connectors	Ethernet: 4x 10Gb Ethernet SFP+ port ** Fibre Channel: 8/6 Fibre Channel ports: N ports, support 2, 4, 8Gb/s
Jumbo Frame	Up to 16K bytes (10G) or 9K bytes (1G)	Up to 12K bytes (10 GbE) or 2112 bytes (FC)
Remote Management	Browser-based management / CLI	Browser-based management / CLI
Layer 2 Capabilities	4K VLANs, STP, RSTP, MSTP, IGMP snooping, 802.1x, 802.3ad (Full Link aggregation)	4K VLANs, STP, RSTP, MSTP, IGMP snooping, 802.1x, 802.3ad (Full Link aggregation)
Layer 3 Capabilities	ACL, DHCP, VRRP, RIP, OSPF, BGP, IPv6, RIPng, OSPFv3, IGMP, PIM, DVMRP, QoS	ACL, DHCP, VRRP, RIP, OSPF, BGP, IPv6, RIPng, OSPFv3, IGMP, PIM, DVMRP, QoS
FC Classes	N/A	2, 3
OS	Software upgradeable	Software

\* Supports optional mini-CMM (BMB-CMM-002)

### Key Advantages of Supermicro SuperBlade® Networking Solutions

**Highly Integrated-** Connection to SuperBlade® backplane optimizes networking flexibility

**Easy-to-Manage-** Unified and cost-effective solution for both LAN and SAN networking

**Power and Space Saving-** Compact designs for maximum efficiency

**Easy to Install and Service-** Quick snap-in/out installation from chassis rear

**Reliability-** Shared and redundant power supplies and cooling

**Cutting-Edge Technology-** Including 10GbE, Fibre Channel and FDR InfiniBand

## Ethernet Pass-Through Solutions



Model	SBM-GEP-T20	SBM-GEM-002	SBM-XEM-002M**
Internal Ports	Twenty 1-Gbps downlink ports for LAN interfaces of TwinBlade server blades	Fourteen 1-Gbps downlink ports for LAN interfaces of Server blades	Fourteen 10-Gbps downlink XAUI ports
External Uplink Ports	Twenty 1-Gbps uplink RJ45 ports	Fourteen 1-Gbps uplink RJ-45 ports (Speed fixed at 1-Gbps - no auto negotiation)	Fourteen 10-Gbps uplink SFP+ ports (Speed fixed at 10-Gbps - no auto negotiation)
Type	Ethernet pass-through module for TwinBlade SBE-720D and SBE-720E enclosure	Ethernet pass-through module for 10-Blade and 14-Blade enclosure	10G Ethernet pass-through module for 10-Blade (SBE-710E) and 14-Blade (SBE-714E) enclosure

\*\* Supports optional BMB-CMM-002 Mini CMM

## InfiniBand Switch Solutions



Model	SBM-IBS-F3616(M)***	SBM-IBS-Q3618/Q3616(M)***	SBM-IBS-001
Internal Ports	20 4 FDR downlink ports	18/20 4 QDR downlink ports	14 internal 4 DDR
External Uplinks	16 4 FDR QSFP uplink ports	18/16 4 QDR QSFP uplink ports	10 external ports : 4 DDR-copper
Type	4 FDR InfiniBand Switch	4 QDR InfiniBand switch	4 DDR InfiniBand switch
Bandwidth	4 FDR non-blocking architecture with 20x FDR 40Gbps downlinks and 16 FDR 56Gbps uplinks. 3.39 Tbps total switch bandwidth (36-port)	4 QDR (40Gbps) non-blocking architecture 2.88Tbps total switch bandwidth (36-port)	4 DDR (20Gbps) non-blocking architecture 960Gbps total switch bandwidth (24-port)

\*\*\* "M" version supports BMB-CMM-002 Mini CMM

## InfiniBand/10GbE Mezzanine HCA



Model	AOC-XEH-IN2	AOC-IBH-X3QD	AOC-IBH-X3QS	AOC-IBH-XQD	AOC-IBH-XQS	AOC-IBH-XDD	AOC-IBH-XDS
Chipset	Intel 82599 (Niantic)	Mellanox ConnectX3 IB FDR	Mellanox ConnectX3 IB FDR	Mellanox ConnectX2 IB QDR	Mellanox ConnectX IB QDR	Mellanox ConnectX IB DDR	Mellanox ConnectX IB DDR
Ports	Dual port 10Gbps Ethernet	Dual port 4 FDR/QDR IB or 10GbE	Single port 4 FDR/QDR IB or 10GbE	Dual port 4 QDR/DDR IB or 10GbE	Single port 4 QDR/DDR IB or 10GbE	Dual port 4 DDR IB or 10GbE	Single port 4 DDRIB or 10GbE

# SuperBlade® Power Supply and Power Cable Guide

## Key Advantages of Supermicro High-Efficiency SuperBlade® Power Supplies

**Availability** - Non-stop power with N+1 redundant power supply modules



**Cost Saving** - With 94%+ Platinum Level efficiency, power consumption is significantly reduced, providing a real-world advantage for our environment

**Investment protection** - Power capacity headroom for future generation processors

**Easy installation** - Snap-in installation from the back of the chassis, hot-swappable in operation

**Intelligent power infrastructure** - Each power enclosure includes a power management module that monitors the power supplies and the power enclosure that connects to the blade management

Model	PWS-3K01-BR	PWS-2K53-BR	PWS-1K62-BR
Output	3000W	2500W	1620W
Type	Redundant Module (N+1)	Redundant Module (N+1)	Redundant Module (N+1)
+12V	250A	208A	132A (200~240VAC input) 100A (100-140 VAC input)
5VSB	16A	16A	16A
PFC	Yes	Yes	Yes
Peak Efficiency	94%+ (Platinum)	94%+ (Platinum)	93%+
Input AC Range	200~240VAC	200~240VAC	100~240VAC
Operating Conditions	Temp: -5 to 50° C Humidity: 5 to 95% RH	Temp: -5 to 50° C Humidity: 5 to 95% RH	Temp: -5 to 50° C Humidity: 5 to 95% RH
Fan Type	4x 90mm fans	4x 90mm fans	2x 90mm fans

At the current time, the Supermicro® SuperBlade® is shipping with power supplies of 1620 Watts, 2500 Watts and 3000 Watts. Although the Power Distribution Unit (Figure 3) that is recommended by Supermicro supports up to four power connections, only two connections should be made to each PDU. The PDU has a NEMA L6 connector that can plug into a NEMA L6 or equivalent socket. Each PDU, supporting two power supplies, must be plugged into a separate circuit that provides 30 Amps of power and a voltage ranging from 200-240V. Table 1 below illustrates the various Power Supplies offered by Supermicro. This table shows the maximum power requirement of each model.

Model	Watts	Low Volts	High Volts	Low Amps	10% Reserve	High Amps	10% Reserve	Max Amps
PWS-3K01-BR	3000	200	240	15	1.5	17.5	1.8	19.3
PWS-2K53-BR	2500	200	240	12.9	1.3	15.4	1.5	17
PWS-1K62-BR	1620	200	240	8.3	0.9	9.8	1.0	10.8
PWS-1K62-BR	1200	100	134	10.5	1.0	14.0	1.4	15.4

Table 1 - Power Supply Amperage Draw



Figure 1 - CBL-0223L 2500W/3000W Extension Cord



Figure 3 - MCP-520-00036-0N optional Power Distribution Unit (PDU) with NEMA L6 plug



Figure 2 - CBL-0248L 1620W Extension Cord

For a single 30 Amp circuit supplying a PDU, no more than 2 power supplies may be connected to the PDU.

The Supermicro SuperBlade® product includes a power extension cord CBL-0223L for 2500W/3000W (Figure 1) or CBL-0248L for 1400W/1620W (Figure 2) power supplies. The power cord connects the power supply to a Power Distribution Unit (Figure 3 - optional PDU) in an IT room. The PDU should supply input voltage ranging from 200V to 240V AC. As stated above, the circuit that the PDU plugs into should provide 30 Amps that is not shared by any other device.

Before beginning receptacle installation, consider the following:

- Observe all local electrical codes and practices.
- Ensure that the AC power receptacle is wired to the site AC power via conductors routed through flexible metal conduit or via approved AC power cable before installation.
- Ensure that AC power cord is properly sized, service rated, temperature rated, and complies with all applicable codes and regulations.
- Ensure that the conductors in conduit are properly sized, service rated, temperature rated, color coded, and comply with all applicable codes and regulations.
- Ensure that the AC power cord or conduit is long enough to reach from the site AC power junction box to a location within the distance required for the connection.
- Ensure that the number of power supplies connected to one circuit do not exceed the rated amperage of the circuit.

Please see table below which lists some examples of international power cords that are compatible with Supermicro.

Country	Australia	China	Israel	India / S. Africa	Italy/S. America	Euro	UK	US	US
Model	CBL-0238L (2500W/3000W)	CBL-0239L (2500W/3000W)	CBL-0243L (2500W/3000W)	CBL-0245L (2500W/3000W)	CBL-0244L (2500W/3000W)	CBL-0240L (2500W/3000W)	CBL-0241L (2500W)	CBL-0247L (2500W/3000W)	CBL-0250L (1620W)
Length	2.5m	2.5m	2.5m	2.5m	2.5m	2.5m	2.5m	2.5m	6ft
Inlet	AS 3112	GB-2099-1-1996	SI32	BS 546	CEI 23-16	"Schuko" CEE 7/7	BS 1363	NEMA 6-20P or equivalent	NEMA 5-20P
Equip Outset	IEC-60320-C19	IEC-60320-C19	IEC-60320-C19	IEC-60320-C19	IEC-60320-C19	IEC-60320-C19	IEC-60320-C19	IEC-60320-C19	IEC-60320-C13
Certificate	SAA	CCEE	SII	SABS	VDE, HAR	VDE, KEMA, CEBEC, NEMKO, DEMKO, SETI, OVE, SEV	BSI	UL	UL/CUL
Current	15A	16A	16A	16A	16A	15A	15A	20A	15A
Voltage	250V	250V	250V	250V	250V	250V	250V	250V	250V
Image									

# 42U Rack Cabinets and Accessories



**SRK-42OR-01**  
42U Open Frame  
(950mm Deep)



**SRK-42OR-02**  
42U Open Frame  
(1175mm Deep)



**SRK-42SE-01**  
42U Enclosure  
(1000mm Deep)



**SRK-42SE-02**  
42U Enclosure  
(1225mm Deep)

**S**upermicro's new SuperRack™ systems were designed from the ground up for ease of installation, maintenance, and expansion. They offer easy rear access and cabling arrangements for hot-swap-capable servers, such as Supermicro's Twin and Double-Sided Storage™ families. For a rack system that is convenient, flexible, reliable, customizable, and compatible, the Supermicro's SuperRack is the ideal choice.

## Key Features:

**Per-U Design** - Ground-breaking Per-U design concept simplifies cable management and minimizes integration time



- Versatile Front and Rear access hot-plug optimizations

**Accessible** - Versatile Front and Rear access hot-plug optimizations provide an improve service experience

**Optimized Air Flow** - Reduced cabling optimizes air flow and improves cooling

**Building Block Design** - Building-block design and intuitive installation process reduce overall deployment schedules

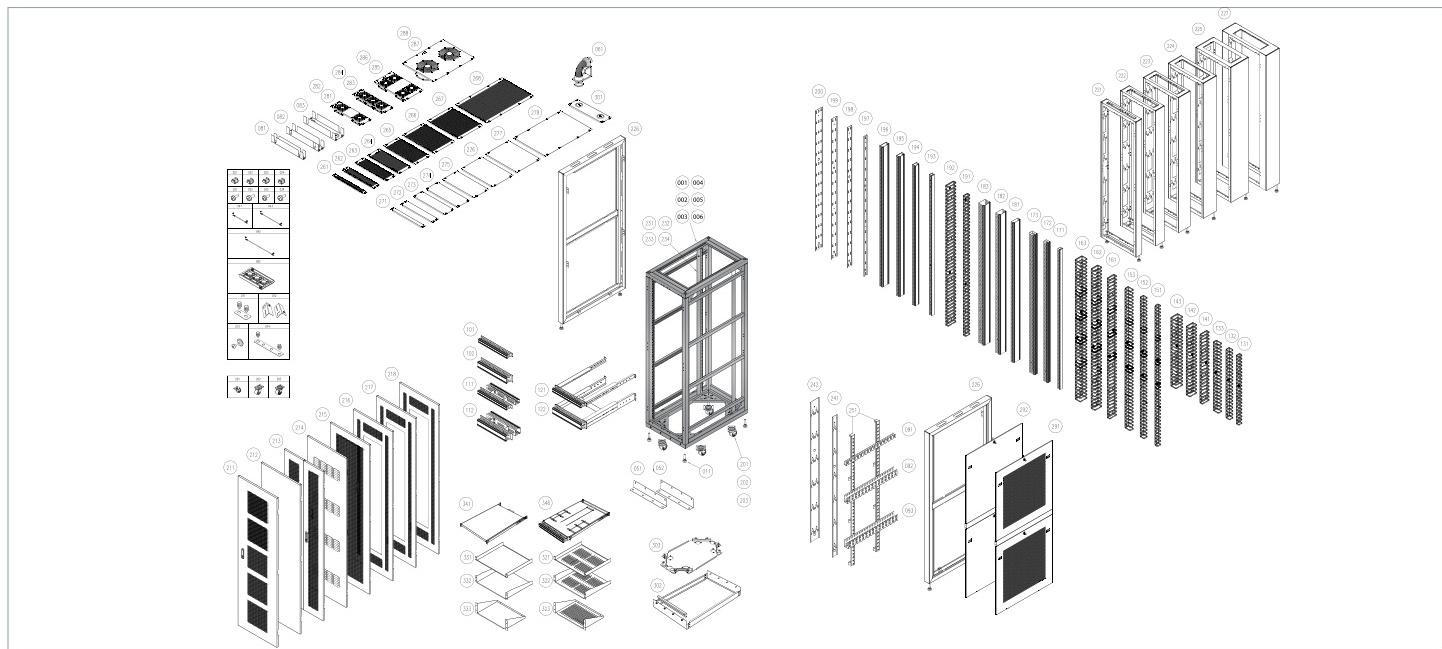
**Expandable** - With unique add-on expansion units the SuperRack easily accommodates many different server configurations

**Customizable** - Fully customizable options offer a well-rounded total Rack solution and service

**SuperRack Total Solution** - Supermicro provides rack system configuration, integration, testing, burn-in, shipping whole rack system to enduser, please contact sales for details



- Per-U Design simplifies cable management and minimizes integration time

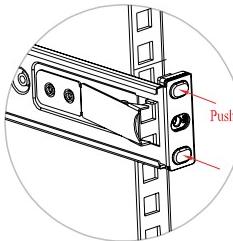


For detailed information, please contact your Supermicro sales representative; or, visit: <http://www.supermicro.com/products/rack>

# Quick-Release Slide Rails

## The Supermicro Tool-less, Quick-release Slide Rails

Designed for quick and easy installation and access to Supermicro's server equipment. Several different sizes are provided to accommodate a variety of Supermicro server systems.



Model Part#	MCP-290-00054-0N	MCP-290-00052-0N-BULK
<b>Product</b>	Optional rail set	Optional outer rail bulk pack
<b>Content</b>	Quick-release inner rail + quick-release outer rail	Quick-release outer rail (10 set/pack)
<b>Chassis Type</b>	1U, 17.2" width	1U, 17.2" width
<b>Mechanism</b>	Linear	Linear
<b>Outer Rail Extendable Length</b>	25.6"~33.05"	25.6"~33.05"
<b>Compatible Chassis</b>	Optional for SC808, 809, 813, 814, 815, 816	Optional for SC113, 113M, 119, 512F-280/350/410/520/600, 515, 808, 809, 813, 813M, 814, 815, 816, 818, 819

### For Short-depth Chassis Rack



Model Part#	MCP-290-00056-0N	MCP-290-00053-0N
<b>Product</b>	Optional short-depth outer rail	Default rail set
<b>Content</b>	Short quick-release outer rail	Quick-release inner rail + quick-release outer rail
<b>Chassis Type</b>	1U, 17.2" width in short-depth rack	2~3U, 17.2" width
<b>Mechanism</b>	Linear	Ball-bearing, support round hole racks with adapter MCP-290-00060-0N
<b>Outer Rail Extendable Length</b>	19"~26.4"	26.5"~36.4"
<b>Compatible Chassis</b>	Optional for SC113, 113M, 119, 512F-280/350/410/520/600, 515, 808, 809, 813, 813M, 814, 815, 816, 818, 819	Default for SC213, 216, 823M, 825, 825M, 826, 827, 828, 835, 836, 936

### For Short-depth Chassis Rack



Model Part#	MCP-290-00057-0N	MCP-290-00058-0N
<b>Product</b>	Default rail set	Optional short-depth rail set
<b>Content</b>	Quick-release inner rail + quick-release outer rail	Quick-release inner rail + quick-release outer rail
<b>Chassis Type</b>	4U, 17.2" width	2~4U, 17.2" width in short-depth rack
<b>Mechanism</b>	Ball-bearing, supports round hole racks with adapter MCP-290-00060-0N	Ball-bearing, supports round hole racks with adapter MCP-290-00060-0N
<b>Outer Rail Extendable Length</b>	26.5"~36.4"	19"~26.6"
<b>Compatible Chassis</b>	Default for SC846, 847, 848, optional for SC842	Optional for SC213, 216, 823M, 825, 825M, 826, 827, 828, 835, 836, 936, 747, 842, 846, 847, 848

# Network Adapters

## Faster, More Flexible Networking

**W**ith outstanding performance, high power efficiency and excellent value, Supermicro's network adapters can help improve network throughput and application performance through features that maximize bandwidth and offload CPU resources. From 10Gb Ethernet to InfiniBand technologies, dual-port and quad-port connectivity, in UIO (Universal I/O) and standard form factors, Supermicro's network adapters are optimized for the most demanding multi-core computing systems.



Model	AOC-UTG-i2*	AOC-UG-i4*
Type	UIO	UIO
Description	Full-height dual-port 10GbE	Full-height quad-port 1GbE
Interface	PCI-E x8	PCI-E x8
Port	2 CX4 ports	4 RJ45 ports
Speed	10 Gb/port	1 Gb/port
Controller	Intel® 82598EB	2 Intel® 82571EB
Dimension (LxW) (without end brackets)	6.57" x 3.86" (16.69 x 9.80cm)	6.57" x 3.86" (16.69 x 9.80cm)
Compatible Motherboards	All Supermicro UIO Motherboards	
Compatible Servers	All Supermicro UIO Servers	



Model	AOC-UINF-m2	AOC-UIBQ-m2	AOC-UIBQ-m1
Type	UIO	UIO	UIO
Description	Low-profile dual-port InfiniBand DDR	Low-profile dual-port InfiniBand QDR	Low-profile single-port InfiniBand QDR
Interface	PCI-E x8 2.0 (5GT/s)	PCI-E x8 2.0 (5GT/s)	PCI-E x8 2.0 (5GT/s)
Port	2 CX4 ports	2 QSFP ports	1 QSFP port
Speed	20Gb/port	40Gb/port	40Gb/port
Controller	Mellanox® ConnectX DDR	Mellanox® ConnectX-2 QDR	Mellanox® ConnectX-2 QDR
Dimension (LxW) (without end brackets)	5.59" x 2.72" (14.2 x 6.9cm)	5.63" x 2.50" (14.29 x 6.35cm)	5.63" x 2.50" (14.29 x 6.35cm)
Compatible Motherboards	All Supermicro UIO Motherboards		
Compatible Servers	All Supermicro UIO Servers		



*NEW! SFP+ Transceiver*



Model	AOC-EXPX9502FXSR	AOC-E10GSFPSR
Type	Standard	SFP+ Transceiver 1000Base-SX / 10GBase-SR plug-in module
Description	Low-profile dual-port 10GbE	Cabling Type: MMF 62.5/50 µm
Interface	PCI-E x8	
Port	2 XFP ports	Products supported: AOC-STGN-i2S
Speed	10Gb/port	
Controller	Intel® 82598EB	
Dimension (LxW) (without end brackets)	6.59" x 2.71" (16.74 x 6.89cm)	
Compatible Motherboards	All motherboards with a PCI-E x8 slot	
Compatible Servers	All servers with PCI-E low-profile or full-height expansion slot	

\* Standard form factor is available as integrated solution with Supermicro server and motherboards.

# HBA and SAS RAID Cards

The SAS RAID card delivers industry leading RAID performance at an unprecedented performance-to-price ratio. For companies running popular applications like web services of file/email servers, the UIO SAS RAID card opens the world of professional RAID performance and combines it with cost-effective SAS and SATA drive compatibility for the ultimate external storage solutions. With an optional battery backup unit and the cached data protection feature allows system builders to protect cached data even from the most catastrophic system failures.



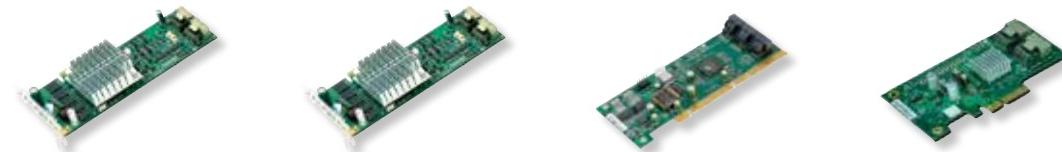
Model	AOC-SAS2LP-MV8	AOC-USAS2LP-H8iR*	AOC-USAS2-L8iR	AOC-USAS2-L8i	AOC-USAS2-L8E	AOC-USAS-L8i
Type	Standard	UIO	UIO	UIO	UIO	UIO
Controller/IOP	Marvel 9480 based	LSISAS 2108	LSISAS 2008	LSISAS 2008	LSISAS 2008	LSISAS 1068E
SAS Port	8 ports, 6Gb/s per port 8 Internal, Low Profile	8 ports, 6Gb/s per port 8 Internal, Low Profile	8 ports, 6Gb/s per port 8 Internal	8 ports, 6Gb/s per port 8 Internal	8 ports, 6Gb/s per port 8 Internal	8 ports, 3Gb/s per port 8 Internal
RAID	HBA	RAID 0,1,5,6,10,50,60	RAID 0,1,5,10	RAID 0,1,10,1E	IT mode / HBA	IT/HBA Mode
Onboard Cache	-	512 MB DDR2 on-card cache w/ battery backup option	-	-	-	-



Model	AOC-USASLP-L8i*	AOC-USAS-L4i	AOC-USAS-L4iR	AOC-USASLP-H8iR*	AOC-USAS-H8iR
Type	UIO	UIO	UIO	UIO	UIO
Controller/IOP	LSISAS 1068E	LSISAS 1068E	LSISAS 1068E	LSISAS 1078	LSISAS 1078
SAS Port	8 ports, 3Gb/s per port 8 Internal, Low Profile	8 ports, 3Gb/s per port 4 Internal, 4 External	8 ports, 3Gb/s per port 4 Internal, 4 External	8 ports, 3Gb/s per port 8 Internal, Low Profile	8 ports, 3Gb/s per port 8 Internal
RAID	IT/HBA Mode	RAID 0,1,10	RAID 0,1,5,10	RAID 0, 1, 5, 6, 10, 50, 60	RAID 0, 1, 5, 6, 10, 50, 60
Onboard Cache	-	-	-	512MB DDR2 on-card cache w/ battery back-up option	256MB DDR2 on-card cache w/ battery back-up option



Model	AOC-USAS-H4iR	AOC-USAS-S4i	AOC-USAS-S4iR	AOC-USAS-S8i	AOC-USAS-S8iR
Type	UIO	UIO	UIO	UIO	UIO
Controller/IOP	LSISAS 1078	Intel® IOP348	Intel® IOP348	Intel® IOP348	Intel® IOP348
SAS Port	8 ports, 3Gb/s per port 4 Internal, 4 External	8 ports, 3Gb/s per port 4 Internal, 4 External	8 ports, 3Gb/s per port 4 Internal, 4 External	8 ports, 3Gb/s per port 8 Internal	8 ports, 3Gb/s per port 8 Internal
RAID	RAID 0, 1, 5, 6, 10, 50, 60	RAID 0,1,10	RAID 0, 1, 5, 6, 10, 50	RAID 0,1,10	RAID 0, 1, 5, 6, 10, 50
Onboard Cache	256MB DDR2 on-card cache w/ battery back-up option	128MB DDR2 on-card cache	256MB DDR2 on-card cache w/ battery back-up option	128MB DDR2 on-card cache	256MB DDR2 on-card cache w/ battery back-up option



Model	AOC-USASLP-S8i*	AOC-USASLP-S8iR*	AOC-SAT2-MV8 (PCI-X)	AOC-SASLP-MV8
Type	UIO	UIO	Standard	Standard
Controller/IOP	Intel® IOP348	Intel® IOP348	Marvell Hercules-2	Marvell Hercules-2
SAS Port	8 ports, 3Gb/s per port 8 Internal, Low Profile	8 ports, 3Gb/s per port 8 Internal, Low Profile	8 ports, 3Gb/s per port 8 Internal, Low Profile	8 ports, 3Gb/s per port 8 Internal, Low Profile
RAID	RAID 0,1,10	RAID 0, 1, 5, 6, 10, 50	HBA only	HBA only
Onboard Cache	128MB DDR2 on-card cache	256MB DDR2 on-card cache w/ battery back-up option	-	-

\* Applies to 2U low-profile, 3U and 4U chassis.

# UIO Riser Cards



Model	RSC-R1UU-2E8	RSC-R1UU-2U	RSC-R1UU-E16	RSC-R1UU-UAX	RSC-R1UU-UE8	RSC-R1UU-AXE8	RSC-R1UU-E8E16	RSC-R1UU-UE16
Position	UIO 1U Left	UIO 1U Left	UIO 1U Left	UIO 1U Left	UIO 1U Left	UIO 1U Left	UIO 1U Left	UIO 1U Left
Motherboard Fit Type	Universal Slot (UIO)	Universal Slot (UIO)	Universal Slot (UIO)	Universal Slot (UIO)	Universal Slot (UIO)	Universal Slot (UIO)	Universal Slot (UIO)	Universal Slot (UIO)
Riser Card Output Type	2 UIO (PCI-E x8)	2 UIO (PCI-E x8)	1 PCI-E x16	1 UIO (PCI-E x8), 1 PCI-X (133/100/66 MHz)	1 UIO (PCI-E x8), 1 PCI-E x8	1 PCI-X (133/100/66 MHz), 1 PCI-E x8	1 PCI-E x8, PCI-E x16	1 UIO (PCI-E x8) 1 PCI-E x16
Design Type	Passive	Passive	Passive	Passive	Passive	Passive	Passive	Passive
Motherboards	H8DMU+, H8SMU, H8DGU series	H8DMU+, H8SMU, H8DGU series	H8DMU+, H8SMU, H8DGU series	H8DMU+, H8SMU, H8DGU series	H8DMU+, H8SMU, H8DGU series	H8DMU+, H8SMU, H8DGU series	H8DGU series	H8DGU series
Chassis	UIO Chassis	UIO Chassis	UIO Chassis	UIO Chassis*	UIO Chassis*	UIO Chassis*	UIO Chassis*	UIO Chassis*
Gen2 Support	Yes, depending on MB slots	Yes, depending on MB slots	Yes, depending on MB slots	Yes, depending on MB slots	Yes, depending on MB slots			
GPU Support	No	No	No	No	No	No	No	No



Model	RSC-R1UU-E8R+	RSC-R2UU-A3XE8	RSC-R2UU-A2XE8	RSC-R2UU-UAX	RSC-R2UU-2U	RSC-R2UU-A4E8	RSC-R2UU-A4E8+	RSC-R2UU-UA3E8
Position	UIO 1U Right	UIO 2U Left	UIO 2U Left	UIO 2U Left	UIO 2U Left	UIO 2U Left	UIO 2U Left	UIO 2U Left
Motherboard Fit Type	PCI-E x8	Universal Slot (UIO)	SXBI Universal Slot (UIO)	Universal Slot (UIO)	Universal Slot (UIO)	Universal Slot (UIO)	Universal Slot (UIO)	Universal Slot (UIO)
Riser Card Output Type	1 PCI-E x8	1 PCI-E x8, 3 PCI-X (133/100/66 MHz), 1 PCI-E x8	2 PCI-X (133/100/66 MHz), 1 PCI-E x8	1 UIO, 3 PCI-X (133/100/66 MHz)	2 UIO	4 PCI-E x8	4 PCI-E x8	1 UIO, 3 PCI-E x8
Design Type	Passive	Active	Active	Active	Passive	Active	Active	Active
Motherboards	H8SMU	H8DMU+, H8SMU, H8DGU series,	H8DMU+, H8SMU	H8DMU+, H8SMU, H8DGU series,	H8DMU+, H8SMU, H8DGU series	H8DMU+, H8SMU	H8DGU series	H8DMU+, H8SMU
Chassis	UIO Chassis	UIO Chassis*	UIO Chassis*	UIO Chassis*	UIO Chassis*	UIO Chassis*	UIO Chassis*	UIO Chassis*
Gen2 Support	No	Yes, depending on MB slots	Yes, depending on MB slots	No	Yes, depending on MB slots	No	Yes	No
GPU Support	No	No	No	No	No	No	No	No



Model	RSC-R2UU-UA3E8+	RSC-R2UU-UE8	RSC-R2UU-2E8	RSC-R2UU-3E8G	RSC-R2UU-E8E16	RSC-R2UU-2ERR
Position	UIO 2U Left	UIO 2U Left	UIO 2U Left	UIO 2U Left	UIO 2U Left	UIO 2U Right
Motherboard Fit Type	Universal Slot (UIO)	Universal Slot (UIO)	Universal Slot (UIO)	Universal Slot (UIO)	Universal Slot (UIO)	Universal Slot (UIO)
Riser Card Output Type	1 UIO, 3 PCI-E x8	1 UIO, 1 PCI-E x8	2 PCI-E x8	3 PCI-E x8	1 PCI-E x16, 1 PCI-E x8	2 PCI-E x8
Design Type	Active	Passive	Passive	Passive	Passive	Passive
Motherboards	H8DGU series	H8DMU+, H8SMU	H8DMU+, H8SMU	H8DGU series	H8DGU series	H8DMU+
Chassis	UIO Chassis	UIO Chassis*	UIO Chassis*	UIO Chassis*	UIO Chassis*	UIO Chassis*
Gen2 Support	Yes	Yes, depending on MB slots	Yes, depending on MB slots	Yes	Yes	Yes, depending on MB slots
GPU Support	No	No	No	No	No	No

\* For detailed information, please contact your Supermicro sales representative; or, visit: <http://www.supermicro.com/support/resources/Riser/riser.aspx>

# Riser Cards



Model	RSC-RIU-AX	RSC-RR1U-E16	CSE-RR1U-E8	RSC-R1UXE-HTi	RSC-R1U-E16R
Position	1U Left	1U Left	1U Left	1U Left	1U RHS
Motherboard Fit Type	PCI-E x16	PCI-E x16	PCI-E x8	PCI-X + HT connector	Universal Slot (UIO)
Riser Card Output Type	PCI-X	1 PCI-E x16	1 PCI-E x8	1 HT/HTX	1 PCI-E x16
Design Type	Active	Passive	Passive	Passive	Passive
Motherboards		H8SMi-2, H8QME-2+, H8QM8-2+, H8QM3-2+, H8QMi-2+, H8Q16+-F, H8Scm(-F), H8SGL(-F), H8QG6+-F, H8QGi+-F, H8Qi+-F, H8QGL-i+F	H8DME-2, H8DM8-2, H8QCE+, H8QC8+	H8DSL-HTi	H8DGT-HLIBQF/HLF, H8DGT-HIBQF/HTF, H8DCT-IBQF/H8DCT-F / H8DCT-HLN4F
Chassis	SCS12, SC811TQ, SC813MTQ"	SC811, SC812, SC813, SC815, SC502, SC512	SC811, SC812, SC813, SC818+, SC815, SC502, SC512	SC813, SC812	SC827 /217
Gen2 Support	No	Yes, depending on MB slots	Yes, depending on MB slots	No	Yes, depending on MB slots
GPU Support	No	No	No	No	No



Model	RSC-RIUG-E16S*	RSC-RR1U-EHT	RSC-RR1U-HT	CSE-RR1U-EL	RSC-R1U-UT	RSC-RIU-UL
Position	1U Left	1U Left	1U Left	1U Left	1U Left	1U Left
Motherboard Fit Type	PCI-E x16	PCI-E x8 + HT connector	PCI-E x8 + HT connector	Universal PCI (SXB-E) Slot	Universal UIO	PCI-E x8
Riser Card Output Type	1 PCI-E x16	1 PCI-E x8, 1 HT/HTX	InfiniBand Card (Pathscale)	1 PCI-E x8	1 UIO	UIO Slot
Design Type	Passive	Passive	Passive	Passive	Passive	Passive
Motherboards	H8DGG-QF	H8DCE-HTe, H8QCE+/8+, H8QM8-2+/E-2+	H8QC8+/E+, H8QM8-2+E-2+ H8QGL-i+F	H8DCR-3/i, H8DSP-8/i, H8SSP-8/i, H8DMR-82/i2	H8DMT+, H8DMT	H8QGL series H8DGi series
Chassis	SC118G	SC818+, SC812, SC813+	SC818+	SC811, SC812, SC813, SC814, SC815	SC808T, SC809T/TQ	SC815, SC818, SC113
Gen2 Support	Yes	No	No	No	No	Yes, depending on MB slots
GPU Support	Yes	No	No	No	No	No



Model	RSC-RIUG-E16	CSE-RR1U-XLP	CSE-RR1U-XR	CSE-RR1U-ELP	CSE-RR1U-ER	RSC-RIU-E8R	RSC-RIUG-E16R	RSC-RIUG-UR
Position	1U Left	1U Right	1U Right	1U Right	1U Right	1U Right	1U Right	1U Right
Motherboard Fit Type	Universal Slot (UIO)	PCI-X (133/100/66/33 MHz)	PCI-X (133/100/66/33 MHz)	Universal PCI Slot	Universal PCI (SXB-E) Slot	PCI-E x8	Universal Slot (UIO)	PCI-E x8
Riser Card Output Type	1 PCI-E x16	1 PCI-X (133/100/66/33 MHz, low profile)	1 PCI-X (133/100/66/33 MHz, full size)	1 PCI-E x8 (low profile)	1 PCI-E x8 (low profile)	1 PCI-E x8	1 PCI-E x16	PCI-E x8
Design Type	Passive	Passive	Passive	Passive	Passive	Passive	Passive	Passive
Motherboards	H8DGG-QF	H8DAR-T/E, H8DSR-8/i, H8DCR-3/i, H8DMR-82/i2	H8DSP-i	H8DCR-3/i, H8DMR-82/i2	H8DSP-L, H8DSP-8/i, H8SSP-8/i,			
Chassis	SC818G, SC118G	SC812, SC813, SC815	SC814, SC816, SC819	SC812, SC8413, SC815	SC814, SC816, SC819	SC808, SC809	SC818G, SC118G	SC818G, SC118G
Gen2 Support	Yes	No	No	No	No	Yes, depending on MB slots	Yes	Yes
GPU Support	Yes	No	No	No	No	No	Yes	Yes



Model	CSE-RR2UE-AX	RSC-R2U-E8	RSC-R2UE-A3E8	RSC-R2UT-2E8R	RSC-R2UT-E16R
Position	2U Left	2U Left	2U Left	2U Right	2U Right
Motherboard Fit Type	PCI-E x8 Slot with SEPC	PCI-E x8 Slot	PCI-E x8 Slot with SEPC	PCI-E x16 Slot	PCI-E x16 Slot
Riser Card Output Type	3 PCI-X (133/100/66 MHz)	1 PCI-E x8 Slot	3 PCI-E x8	2 PCI-E x8	1 PCI-E x16
Design Type	Active	Passive	Active	Passive	Passive
Motherboards	H8DMi-2, H8DME-2, H8DMS-2, H8DM3-2		H8DM8-2, H8DME-2, H8DM3-2, H8DMi-2		H8DGT series
Chassis	SC825*, SC826*, SC823*	SC216*, SC825*, SC826*	SC825*, SC826*, SC216*	SC827HD-R1400B	SC827HD-R1400B
Gen2 Support	No	No	No	Yes	Yes
GPU Support	No	No	No	No	Yes

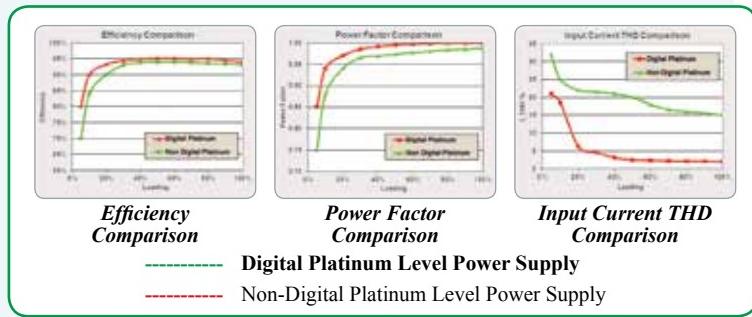
\* For detailed information, please contact your Supermicro sales representative; or, visit: <http://www.supermicro.com/support/resources/Riser/riser.aspx>

# Power Supplies

## Digital Switching Power Supplies

### 95% Platinum Level Power Efficiency!

- New generation Digital Switching Power Supplies
- Improved power efficiency (5~10%) in light loading
- Improved power factory correction (5~10%) in light loading
- Reduce current THD (15%) power transmission loss
- Real-time monitoring & enhanced system reliability


*New!*

*New!*

*New!*

*New!*

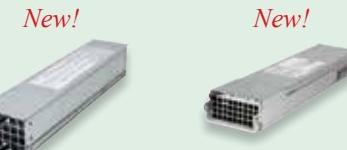
*New!*


Model	PWS-1K28P-SQ	PWS-982P-1R	PWS-1K43F-1R	PWS-605P-1H	PWS-341P-1H
Total Output Power	1000W/1280W	850W/980W	1200W/1400W	600W	340W
Input	100-240Vac/ 50-60Hz	100-240Vac / 50-60hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz
Form Factor	1U	1U	1U	1U	1U
Dimension (LxWxH) cm	36 x 7.6 x 4	32.2 x 5.45 x 4	29.8 x 10.5 x 4	28 x 7.6 x 4	28 x 7.6 x 4
Output Type*	Backplanes Available	Backplanes Available	Backplanes Available	24pin ATX Cable	24pin ATX Cable
Redundant	Yes	Yes	Yes	N/A	N/A
I <sup>2</sup> C Remote Monitoring	FRU Data and PMBus	FRU Data and PMbus	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus
+5V	-	-	-	18A	18A
+12V	83A(100-140Vac) 106.7A(180-240Vac)	70A (100-140Vac) 81A (180- 240Vac)	100A (100-140Vac) 116A (180-240Vac)	49A	28A
+3.3V	-	-	-	15A	15A
5VSB	4A	4A	4A	3A	3A
-12V	-	-	-	.5A	.5A
Efficiency					Platinum Level (Certification Pending)

## BBP (Battery Backup Power) Solutions

### Evolutionary Design to Replace UPS!

- Increases overall data center power efficiency
- Hot-swappable and easy deployed
- Eliminates UPS while maintaining system power stability and redundancy
- Frees UPS space to increase server density deployment
- Flexible configurations available for current Supermicro systems
- More cost-effective than traditional Data Center UPS
- Fits most Supermicro SuperServers, Storage, and Embedded solutions



Model	PWS-206B-1R	PWS-1K03B-1R
Total Output Power	200W/5 minutes	1000W/2 minutes
Input	Work w/ PWS-406P/ 606P/703P/704P/ 503P/504P-1R	Work w/ PWS-1K28P-SQ/ PWS-920P-SQ/PWS-741P- 1R/PWS-501P-1R
Form Factor	1U	1U
Dimension (LxWxH) cm	22 x 5.45 x 4	36 x 7.6 x 4
Output Type*	Backplanes available	Backplanes available
Redundant	Yes	Yes
I <sup>2</sup> C Remote Monitoring	FRU/Smart battery I <sup>2</sup> C	FRU/Smart battery I <sup>2</sup> C
+5V	-	-
+12V	16.7A	83.3A
+3.3V	-	-
5VSB	1A	4A
-12V	-	-
Efficiency	Online mode power consumption <1W	Online mode power consumption <1W

# Power Supplies

New!

New!

New!

New!

New!

New!



Model	PWS-741P-1R	PWS-501P-1R	PWS-920P-SQ	PWS-504P-1R	PWS-1K62P-1R	PWS-1K81P-1R	PWS-606-1R	PWS-920P-1R	PWS-1K41P-1R	PWS-1K21P-1R
Total Output Power	740W	500W	920W	500W	1000/1200/1620W	1000/1200/1800W	600W	920W	1100W/1400W	1000W/1200W
Input	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz
Form Factor	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U
Dimension (LxWxH) cm	36 x 7.6 x 4	36 x 7.6 x 4	36 x 7.6 x 4	32.2 x 5.45 x 4	36 x 7.6 x 4	30.5 x 9.1 x 4	22 x 5.45 x 4	36 x 7.6 x 4	36 x 7.6 x 4	36 x 7.6 x 4
Output Type*	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available				
Redundant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
FC Remote Monitoring	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus				
+5V	-	-	-	-	-	-	-	-	-	-
+12V	61.7A	41.7A	75A	42A	84A (100-120Vac) 100A (120-140Vac) 135A (180-264Vac)	84A (100-120Vac) 100A (120-140Vac) 150A (180-264Vac)	50A	75A	92A (100-140Vac) 116A (180-240Vac)	83A(100-140Vac) 100A(180-240Vac)
+3.3V	-	-	-	-	-	-	-	-	-	-
5VSB	3A	3A	4A	3A	4A	4A	3A	4A	4A	4A
-12V	-	-	-	-	-	-	-	-	-	-
Efficiency										



Model	PWS-721P-1R	PWS-406P-1R	PWS-704P-1R	PWS-703P-1R	PWS-1K41F-1R	PWS-654-1R	PWS-1K11P-1R	PWS-441P-1H	PWS-653-2H
Total Output Power	720W	400W	700W/750W	700W/750W	1200W/1400W	650W	850W/1010W	440W/480W	600W/650W
Input	100-240Vac/ 50-60Hz	100-240Vac/ 50-60hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz	-44Vdc to -72Vdc	-36Vdc to -76Vdc	100-240Vac / 50-60hz	100-240Vac / 50-60hz
Form Factor	1U	1U	1U	1U	1U	1U	1U	1U	2U
Dimension (LxWxH) cm	36 x 7.6 x 4	22 x 5.45 x 4	32.2 x 5.45 x 4	32.2 x 5 x 4	29.8 x 10.5 x 4	32.2 x 5.45 x 4	36 x 7.6 x 4	22 x 10 x 4	30.8 x 10.6 x 8.4
Output Type*	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	24pin ATX Cable	24pin ATX Cable
Redundant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	N/A
FC Remote Monitoring	PMBus	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus	FRU Data	FRU Data and PMBus	FRU Data and PMbus	N/A
+5V	-	-	-	-	-	-	-	18A	30A
+12V	59A	33A	58A (100-140Vac) 62A (180-240Vac)	58A (100-140Vac) 62A (180-240Vac)	100A (100-140Vac) 116A (180-240Vac)	53.28A	70A (-36 to -42Vdc) 83A (-43 to -76Vdc)	35.8A (100-140Vac) 39.1A (180-240Vac)	49A (100-140Vac) 54A (180-240Vac)
+3.3V	-	-	-	-	-	-	-	15A	25A
5VSB	3A	3A	3A	3A	4A	3A	4A	3A	4A
-12V	-	-	-	-	-	-	-	.5A	.5A
Efficiency						Typical 90%+	Typical 90%+	Platinum Level (Certification Pending)	

New!



Model	PWS-203-1H	PWS-563-1H/20	PWS-333-1H/20	PWS-601-1H	PWS-351-1H	PWS-1K25P-PQ	PWS-903-PQ	PWS-665-PQ	PWS-502-PQ
Total Output Power	200W	560W/600W	330W/380W	600W/680W	350W	1000/1200W	900W	665W	500W
Input	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz
Form Factor	1U	1U	1U	1U	1U	Extended ATX, PS2	Extended ATX, PS2	Extended ATX, PS2	Standard ATX
Dimension (LxWxH) cm	19.3 x 7.6 x 4	28 x 7.6 x 4	28 x 7.6 x 4	22 x 10 x 4	22 x 10 x 4	18.5 x 15 x 8.6	19 x 15 x 8.6	18.5 x 15 x 8.6	14 x 15 x 8.6
Output Type*	20pin ATX Cable	20 or 24pin ATX Cable	20 or 24pin ATX Cable	24pin ATX Cable	24pin ATX Cable	24pin ATX Cable	24 pin ATX Cable	24 pin ATX Cable	24pin ATX Cable
Redundant	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FC Remote Monitoring	N/A	N/A	N/A	N/A	N/A	FRU Data and PMBus	N/A	N/A	N/A
+5V	8A	18A	18A	20A	18A	20A	25A	30A	20A
+12V	16A	46A (100-140Vac) 49A (180-240Vac)	27A (100-140Vac) 31A (180-240Vac)	49A (100-140Vac) 56A (180-240Vac)	29A	83A (100-114Vac) 99A (115-240Vac)	12V1 25A; 12V2 25A; 12V3 25A; 12V4 25A;	54A	12V1 16A; 12V2 18A; 12V3 18A; 12V4 18A
+3.3V	8A	15A	15A	16A	15A	20A	25A	24A	15A
5VSB	2A	3A	3A	3A	3A	3A	4A	6A	3A
-12V	.5A	.5A	.5A	.5A	.5A	.5A	.5A	.5A	.5A
Efficiency									

# Heatsinks



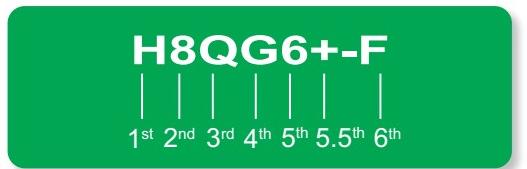
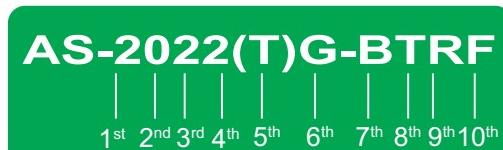
**SNK-P0042P    SNK-P0043P    SNK-P0022+    SNK-P0023P(+)    SNK-P0026    SNK-P0024AP4    SNK-P0048AP4    SNK-P0050AP4    SNK-P0037P**

1U Passive Heatsink	2U and above Passive Heatsink	1U Passive Heatsink	2U and above Passive Heatsink	1U Passive Heatsink for AM2 Socket	4-wire Active Heatsink for 4U/Tower	4U Active Heatsink	4U Active Heatsink	1U Passive Heatsink
Heatsink MB	1U		2U		3U		4U	
	Passive	Active	Passive / Active		Passive		Passive	Active
<b>H8SCM(-F)</b>	SNK-P0022+		SNK-P0023P(+)		N/A	N/A	SNK-P0024AP4	
<b>H8SSL-i2</b>	SNK-P0026		N/A		N/A	N/A	SNK-P0027AP4	
<b>H8SMU</b>	SNK-P0026		N/A		N/A	N/A	N/A	
<b>H8SMi/A-2</b>	SNK-P0026		N/A		N/A	N/A	SNK-P0027AP4	
<b>H8SGL(-F)</b>	SNK-P0042P		SNK-P0043P		SNK-P0043P	N/A	N/A	
<b>H8DCL-6/i (F)</b>	N/A		N/A		N/A	N/A	SNK-P0024AP4	
<b>H8DCT-HLN4F/ HIBQF</b>	SNK-P0037P		N/A		N/A	N/A	N/A	
<b>H8DCT-F/HBQF</b>	SNK-P0022+		SNK-P0048AP4**		N/A	N/A	N/A	
<b>H8DGG-QF</b>	SNK-P0042P		N/A		N/A	N/A	N/A	
<b>H8DGT-HLF/ HLIBQF</b>	SNK-P0037P		N/A		N/A	N/A	N/A	
<b>H8DGT-HF/ HIBQF</b>	SNK-P0042P		N/A		N/A	N/A	N/A	
<b>H8DGG-QF</b>	SNK-P0042P		N/A		N/A	N/A	N/A	
<b>H8DMR-82/ i2</b>	SNK-P0022+		N/A		N/A	N/A	N/A	
<b>H8DM8/E-2</b>	SNK-P0022+		SNK-P0023P		N/A	SNK-P0023P	N/A	
<b>H8DM3/i-2</b>	N/A		SNK-P0023P		N/A	SNK-P0023P	N/A	
<b>H8DMU+</b>	SNK-P0022+		SNK-P0023P		N/A	N/A	N/A	
<b>H8DGU-LN4F+</b>	SNK-P0042P		SNK-P0043P		N/A	N/A	N/A	
<b>H8DGU-(F)</b>	SNK-P0042P		SNK-P0043P		N/A	N/A	N/A	
<b>H8DG6/i-(F)</b>	SNK-P0042P		SNK-P0043P		N/A	SNK-P0043P	SNK-P0050AP4*	
<b>H8DMT-INF+</b>	SNK-P0022+		N/A		N/A	N/A	N/A	
<b>H8DA3/i-2</b>	N/A		N/A		N/A	N/A	SNK-P0024AP4	
<b>H8DA8/E-2</b>	N/A		N/A		N/A	N/A	N/A	
<b>H8DMT/-IBX(F)</b>	SNK-P0022+		N/A		N/A	N/A	N/A	
<b>H8DI3/i+(-F)</b>	N/A		SNK-P0023P		N/A	N/A	N/A	
<b>H8DA6+/i+(-F)</b>	N/A		N/A		N/A	N/A	SNK-P0024AP4	
<b>H8QGL-6F/IF</b>	SNK-P0042P		SNK-P0043P		SNK-P0043P	SNK-P0043P	N/A	
<b>H8QGL-6F+/iF+</b>	SNK-P0042P		SNK-P0043P		SNK-P0043P	SNK-P0043P	N/A	
<b>H8QM8/E-2</b>	N/A		SNK-P0023P+		N/A	SNK-P0023P+	N/A	
<b>H8QM8/E-2+</b>	SNK-P0022+		SNK-P0023P+		N/A	N/A	N/A	
<b>H8QM3/i-2</b>	N/A		SNK-P0023P+		N/A	SNK-P0023P+	N/A	
<b>H8QM3/i-2+</b>	SNK-P0022+		N/A		N/A	N/A	N/A	
<b>H8QI6/i+(-F)</b>	SNK-P0022+		N/A		N/A	N/A	N/A	
<b>H8QI6/i-F</b>	N/A		SNK-P0023P+		N/A	SNK-P0023P	N/A	
<b>H8QG6/i+(-F)</b>	SNK-P0042P		N/A		N/A	N/A	N/A	
<b>H8QG6/i-F</b>	N/A		SNK-P0043P		N/A	SNK-P0043P	N/A	

\* Requires BKT-0050L-G34

\*\* Requires BKT-0048L-C32

# Product Naming Guide



## Motherboard Naming Guide

Character	Representation	Options
<b>1st + 2nd</b>	CPU Type	<ul style="list-style-type: none"> <li><b>H8</b> = AMD Opteron™ Processor</li> <li><b>Q</b> = Quad CPU</li> <li><b>D</b> = Dual CPU</li> <li><b>S</b> = Single CPU</li> </ul>
<b>3rd</b>	CPU Supported	<ul style="list-style-type: none"> <li>----- DDR3 Generation Boards -----</li> <li><b>G</b> = Socket G34 (Opteron 6000 series)</li> <li><b>C</b> = Socket C32 (Opteron 4000 series)</li> <li><b>M</b> = Socket AM3+ (Opteron 3000 series)</li> <li>----- Previous Generation Boards -----</li> <li><b>I</b> = Socket F with AMD SR56x0 / SP5100 Chipset</li> <li><b>A</b> = Socket F Workstation with AMD SR56x0 / SP5100 Chipset or nVidia MCP55 Pro / IO 55 Chipset</li> <li><b>Or</b> = Socket 940 Server board with AMD 8131 / AMD 8132 Chipset</li> <li><b>A</b> = AMD 8131 / AMD 8132 Chipset</li> <li><b>C</b> = nVidia nForce Pro 2200 / 2050 Chipset</li> <li><b>M</b> = nVidia MCP55 Pro / IO 55 Chipset</li> <li><b>S</b> = Serverworks HT2000 / HT1000 Chipset</li> </ul>
<b>4th</b>	Chipset / Board Type	<ul style="list-style-type: none"> <li>----- SAS -----</li> <li><b>3</b> = SAS</li> <li><b>6</b> = LSI 2008 SAS2</li> <li><b>7</b> = LSI 2208 or 2308 SAS2</li> <li><b>8</b> = Dual Channel SCSI</li> <li><b>A</b> = Workstation Board</li> <li><b>P</b> = Proprietary Form Factor</li> <li><b>E</b> = IDE / SATA</li> <li><b>G</b> = GPU</li> <li><b>i</b> = SATA only</li> <li><b>L</b> = Low Cost</li> <li><b>M</b> = Micro ATX</li> <li><b>R</b> = 1U (Rack) Board</li> <li><b>T</b> = Twin architecture</li> <li><b>U</b> = UIO architecture</li> </ul>
<b>5.5th</b>	Board Type	<b>For Quad Socket MB</b> <ul style="list-style-type: none"> <li><b>+</b> = Motherboard to support 1U platform</li> </ul> <b>For Dual Socket MB</b> <ul style="list-style-type: none"> <li><b>+</b> = Socket-F Motherboard with 16 DIMM</li> </ul>
<b>6th</b>	Interface / I/O Options / Memory Type	<ul style="list-style-type: none"> <li>----- DDR3 Generation Boards -----</li> <li><b>F</b> = Integrated IPMI 2.0</li> <li><b>LN4</b> = On-board 4 LAN</li> <li><b>+</b> = 24 DIMM (for G34 2P) <ul style="list-style-type: none"> <li>= Supports 1U (for 4P)</li> </ul> </li> <li><b>6</b> = LSI 2008 SAS2</li> <li><b>7</b> = LSI 2208 or 2308 SAS2</li> <li><b>i</b> = SATA only</li> <li><b>H</b> = Hotpluggable</li> <li><b>IBQ</b> = Onboard Connect-X2 Infiniband w/QSFP connector</li> </ul> <ul style="list-style-type: none"> <li>----- Previous Generation Boards -----</li> <li><b>2</b> = DDR2 Memory</li> <li><b>3</b> = SAS</li> <li><b>8</b> = Dual Channel U320 SCSI</li> <li><b>E</b> = IDE / SATA</li> <li><b>i</b> = IDE / SATA</li> <li><b>IBX</b> = Onboard Connect-X Infiniband w/ CX4 connector</li> <li><b>IN</b> = Onboard Infinihost III Infiniband w/ CX4 Connect</li> </ul>

## A+ Server Naming Guide

Character	Representation	Options
<b>1st</b>	Form Factor	<ul style="list-style-type: none"> <li><b>1</b> = 1U</li> <li><b>2</b> = 2U</li> <li><b>3</b> = 3U</li> <li><b>4</b> = 4U / Tower or Mid-Tower</li> </ul>
<b>2nd</b>	HD Tray Type	<ul style="list-style-type: none"> <li><b>0</b> = 3.5"</li> <li><b>1</b> = 2.5"</li> </ul>
<b>3rd</b>	CPU	<ul style="list-style-type: none"> <li><b>1</b> = Single CPU</li> <li><b>2</b> = Dual CPU</li> <li><b>4</b> = Quad CPU</li> </ul>
<b>4th</b>	Generation	<ul style="list-style-type: none"> <li><b>0</b> = 1st Generation (Opteron 940)</li> <li><b>1</b> = 2nd Generation (Socket F/AM2)</li> <li><b>2</b> = 3rd Generation (Socket G34, C32, AM3+)</li> </ul>
<b>5th</b>	Server Platform	<ul style="list-style-type: none"> <li><b>T</b> = Twin Server</li> <li><b>G</b> = GPU</li> </ul>
<b>6th</b>	MB Platform / Chipset	<ul style="list-style-type: none"> <li><b>A</b> = AMD Chipset (Socket F/AM2+/AM3+)</li> <li><b>C</b> = Socket C32 Board</li> <li><b>G</b> = Socket G34 Board</li> <li><b>S</b> = Serverworks Chipset</li> <li><b>M</b> = nVidia MCP55 Pro Chipset</li> </ul>
<b>7th/8th</b>	Interface Type	<ul style="list-style-type: none"> <li><b>2</b> = DDR2</li> <li><b>3</b> = SAS</li> <li><b>6</b> = SAS2</li> <li><b>8</b> = SCSI</li> <li><b>T</b> = SATA</li> <li><b>I</b> = IDE</li> <li><b>U</b> = UIO</li> <li><b>N</b> = N:Neutral (2 std. PCI-E &amp;SATA)</li> <li><b>L</b> = Cost-Effective Solution</li> <li><b>H(B)</b> = (Twin hot-plug)</li> <li><b>H(D)</b> = Dual node twin hot-plug</li> <li><b>M(R/F)</b> = Short depth &lt;15" chassis rear (R=Rear/F=Front I/O)</li> <li><b>IBQ(IXB)</b> = InfiniBand QDR (DDR)</li> <li><b>70</b> = LSI 2008</li> <li><b>71</b> = LSI 2108</li> <li><b>72</b> = LSI 2208</li> <li><b>73</b> = LSI 2308</li> </ul>
<b>9th and higher</b>	Power Redundancy / IPMI	<ul style="list-style-type: none"> <li><b>4</b> = Quad LAN</li> <li><b>F</b> = IPMI (Intelligent Platform Management Interface)</li> <li><b>R</b> = Redundant Power</li> <li><b>+</b> = Max Memory Support Enabled (12 or up per CPU Socket)</li> <li><b>B</b> = Black Chassis (only at last place)</li> </ul>

# Product Naming Guide

**SC825MTQ-R700LPB**

1<sup>st</sup> 2<sup>nd</sup> 3<sup>rd</sup> 4<sup>th</sup> 5<sup>th</sup> 6<sup>th</sup> 7<sup>th</sup>

## Chassis Naming Guide

Character	Representation	Options		
<b>1st</b>	Prefix	<ul style="list-style-type: none"> <li><b>SC</b> = Super Chassis (Model Number)</li> <li><b>CSE</b> = Super Chassis (Part Number Prefix)</li> </ul>		
		<b>2.5" HDD Chassis</b> <b>1st Digit = Height</b> <ul style="list-style-type: none"> <li><b>0</b> = Twin / Extra short</li> <li><b>1</b> = 1U</li> <li><b>2</b> = 2U</li> <li><b>3</b> = 3U / Mid-Tower</li> <li><b>4</b> = 4U / Tower</li> <li><b>5</b> = SU</li> <li><b>6</b> = 6U</li> </ul> <b>2nd Digit = Generation</b>	<b>3.5" HDD Chassis</b> <b>1st Digit = Category</b> <ul style="list-style-type: none"> <li><b>5xx</b> = Compact size</li> <li><b>7xx</b> = Tower / Workstation</li> <li><b>8xx / 9xx</b> = Rackable chassis</li> <li><b>xx6</b> = Storage chassis</li> <li><b>xx9</b> = Resource Optimized</li> </ul>	<b>Mobile Rack</b> 1st Digit (Default = "M")
<b>2nd</b>	Type/Family	<b>3rd Digit = Category</b> <ul style="list-style-type: none"> <li><b>1</b> = Cost Effective Series</li> <li><b>2</b> = Standard Series</li> <li><b>3</b> = High-end Series</li> <li><b>6</b> = Storage Series</li> <li><b>8</b> = MP motherboard Series</li> <li><b>9</b> = Resource Optimized</li> </ul> <b>4th Digit = Type</b> (multiple types possible) <ul style="list-style-type: none"> <li><b>(none)</b> = Regular</li> <li><b>E</b> = Lower Cost (Economic)</li> <li><b>F</b> = Modified Fan (originally use blower)</li> <li><b>H</b> = Specialized for Intel Itanium 2</li> <li><b>L</b> = Low Cost</li> <li><b>M</b> = Short-depth</li> <li><b>+</b> = Specialized for AMD MBs (can be placed after backplane type)</li> </ul>	<b>2nd Digit = Height</b> <ul style="list-style-type: none"> <li><b>0</b> = Twin / Extra short</li> <li><b>1</b> = 1U</li> <li><b>2</b> = 2U</li> <li><b>3</b> = 3U / Mid-Tower</li> <li><b>4</b> = 4U / Tower</li> <li><b>5</b> = SU</li> <li><b>6</b> = 6U</li> </ul> <b>3rd Digit = Generation</b>	2nd Digit = # of 5.25" Bays 3rd Digit = # of 2.5" HDD Converted
<b>3rd</b>	Backplane Type	<ul style="list-style-type: none"> <li><b>(none)</b> = No backplane design</li> <li><b>A</b> = SAS/SATA with Mini-iPass</li> <li><b>E1/E16</b> = SAS(2)/SATA(3) with 1 expander</li> <li><b>E2/E26</b> = SAS(2)/SATA(3) with 2 expanders</li> </ul>	<ul style="list-style-type: none"> <li><b>H / HD / HQ</b> = Hot-swap MB nodes design</li> <li><b>i</b> = No backplane SKU</li> <li><b>S / S1</b> = SCSI (Single-Channel)</li> <li><b>S2</b> = SCSI (Dual-Channel)</li> </ul>	<ul style="list-style-type: none"> <li><b>T</b> = SAS / SATA</li> <li><b>TQ</b> = SAS / SATA with SES2 support</li> <li><b>TS</b> = Backplane not installed</li> <li><b>TG / G</b> = GPU optimized</li> </ul>
<b>4th</b>	Power Supply	<ul style="list-style-type: none"> <li><b>(none)</b> = Non-redundant power supplies</li> <li><b>R</b> = Redundant power supplies</li> </ul>		
<b>5th</b>	Power Supply Wattage	<ul style="list-style-type: none"> <li><b>(example: 900 = 900 Watts)</b></li> </ul>		
<b>6th</b>	Rear Window I/O	<ul style="list-style-type: none"> <li><b>(none)</b> = Optimized (may not be standard)</li> <li><b>C</b> = Standard I/O Rear Window</li> </ul>	<ul style="list-style-type: none"> <li><b>LP</b> = Low Profile Rear Window</li> <li><b>RC</b> = Rear Window for Riser Cards, Type I</li> </ul>	<ul style="list-style-type: none"> <li><b>RC2</b> = Rear Window for Riser Cards, Type II</li> <li><b>U</b> = UIO Rear Window</li> </ul>
<b>7th</b>	Chassis Color	<ul style="list-style-type: none"> <li><b>(none)</b> = Beige</li> <li><b>B</b> = Black</li> <li><b>V</b> = Silver</li> </ul>		

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